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# THIS WEEK'S National Petroleum NEWS

## Index to Coming Meetings

*Pennsylvania Grade Crude Oil Association,* Wm. Penn Hotel, Pittsburgh, July 8.

*Independent Oil Men's Association of New England:* Wollaston, Mass., July 10; Fall River, Mass., Aug. 14; Providence, R. I., Sept. 11; Worcester, Mass., Oct. 9.

*North American Gasoline Tax Conference,* Book-Cadillac Hotel, Detroit, Mich., Aug. 7, 8, and 9.

*American Petroleum Institute* division of development and production engineering, Texas-Louisiana-Arkansas district, Galvez Hotel, Galveston, Tex., Sept. 5, 6.

*National Petroleum Association,* Hotel Traymore, Atlantic City, N. J., Sept. 18, 19, 20.

*Rocky Mountain Oil & Gas Association,* Montana division, Calgary, Alta., Sept. 18, 19, 20.

*National Safety Council,* Petroleum Section, Congress Hotel, Chicago, Sept. 30 to Oct. 5.

*International Petroleum Congress,* Tulsa, Oct. 5 to 12.

*Independent Oil Men of America,* Stevens Hotel, Chicago, Oct. 21, 22, 23.

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C. M. FULLER, newly elected president of the Richfield Oil Co. of California, is a marketing division product who entered the industry as a salesman for the old Los Angeles Refining Co., back in 1913. Within less than a year he joined the National Petroleum Co., where he remained until he became director and general manager of the consolidated Los Angeles Refining Co., Richfield Oil Co., and Kellogg Oil Co.

The consolidation took the name of Richfield, which then was purely a marketing organization. In 1923, the Richfield was merged with the United Oil Co., a producing organization, headed by James A. Talbot, now chairman of the board of directors of the Richfield. Mr. Fuller became vice president and general manager.

The present Richfield Oil Co. of California is a reorganization completed in the fall of 1926. Messrs. Talbot and Fuller were president, and vice president, respectively, until the recent change in the official family which made them chairman of the board of directors and president, respectively.

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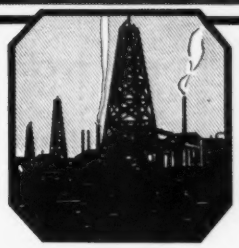

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# Flood of California Oil Expected Before Gas Law Lid Goes On

LOS ANGELES, July 2

WITHIN two months California, now the principal oil state in volume of production, will take the initiative in state regulation of production.

A notice sent out by the state department of natural resources June 27, under the new gas conservation law, gives operators until Aug. 31 to stop blowing natural gas into the air from all wells in the state. Control of gas production carries control of oil production as well.

The intervening two months, however, is likely to see California's increase in output take the nation's production to new high levels for all time. The state's effort at voluntary curtailment was called off June 22, when Umpire F. C. Van Deinse resigned and virtually all companies are now engaged in a scramble to take oil from the ground while restrictions are off.

Events of the next few weeks may give a false picture of the general production situation in the country as a whole. The gain in California will be temporary, as that state is now setting up the machinery to enforce its new gas conservation law, which becomes effective Aug. 18.

Collapse of prorating practice in California may permit the state to exceed 900,000 barrels daily actual production exclusive of the 130,000 barrels of heavy oil that has been consistently shut in without regard to conservation activities.

Summer demand for Oklahoma sweet crude continues to absorb all that state can produce and slightly increased yields from Mid-Continent fields will likely have no effect on market demand.

The economic considerations that have kept Texas production in approximate balance the last two years will continue to function, but the collapse of prorating practice elsewhere will leave no incentive for assumption of burdens there not dictated by best industrial practice.

Texas production as a whole promises to increase to approximately 850,000 barrels daily in July. Of that total, approximately 400,000 barrels daily is to come from the West Texas sulphur crude region, where Yates field production was increased to maximum prorating outlet of 130,000 barrels effective July 1.

Only at Salt Flat, in Cladwell county, south central Texas, where 50,000 barrels daily production has been attained in a non-prorated new field, is it possible to increase current production without engaging in new development. The Howard Glasscock and Winkler producing areas of West Texas are recognized as incapable of increasing exploitable production because of water encroachment, notwithstanding that prorating practice continues in both.

Virtually all producing areas of the country outside the three states mentioned, are in conditions where slight gains in production would be offset by declines elsewhere. The result is that little change in the general domestic industry can be expected to result immediately from any except the three states mentioned.

UNDESIRABILITY of flooding the market with quantities of sulfur crude it could not absorb continues to hold back West Texas development of new areas. Also, operators were clinging to their old policy of storing as little such material above ground as possible.

Townlot drilling at Santa Fe Springs and Long Beach is mainly responsible for the constantly mounting production averages in California. Deep drilling to the O'Connell and upper Clarke zones at Santa Fe Springs have brought approximately 175,000 barrels of daily production from nearly 50 wells producing from these two zones alone. About 40 additional completions due in July and the first week of August indicated that possibly the 300,000 barrels maximum daily production estimated for the field by California observers may be exceeded.

CALIFORNIA gas control law will have the aid of natural declines at Santa Fe Springs in accomplishing the results forecast for it when its machinery begins functioning smoothly. By that time it may be expected rapid declines resulting from flush development will have set in. Better operating practice elsewhere in the state, plus the oil/gas ratios which the control law will take into account, should then materially scale down daily production throughout California and at the same time increase ultimate yields.

One of the salient points of the new law is that the blowing of natural or residual gas into the air is to be considered prima facia evidence of unreasonable waste. Statistics show that nearly 600,000,000 cubic feet of gas is being blown into the air at the present time. To prevent this waste and to secure a reasonable ratio of oil to gas flow many wells in critical fields will have to be adjusted, and this adjustment will serve to restrain a large amount of oil that might otherwise be brought to the surface.

In Kettleman Hills, where several completions are due in the next two months on Federal permit lands, the gas control law will function similarly as elsewhere in California. Agreement among operators to curtail op-

# No Curtailment Action Taken At Kettleman Meeting

LOS ANGELES, June 28

NO DEFINITE action for an effective curtailment of operations in Kettleman Hills was reached at the June 26 meeting of operators. The meeting resolved itself into a controversy between operators and Dr. George Otis Smith representing the Department of the Interior.

The meeting was called by F. C. Van Deinse, former state umpire, to consider a report of the committee of seven which he appointed at the time of the April 19 meeting of Kettleman Hills interests.

The committee's report suggested that the Kettleman Hills permittees and operators under existing contracts should complete to discovery all wells now drilling. After leases have been granted, unless physical conditions render it inadvisable, all production from such wells shall be limited. All wells necessary or advisable as offsets or for the purpose of protecting drainage may be drilled in the same manner and be brought in under the same restrictions and no other wells be spudded in prior to July 1, 1930.

Other parts of the report suggested that the operators should apply for extension of time within which to commence such drilling, upon such terms and conditions as such permittees and the Department of the Interior may agree upon, unless such delay will jeopardize their right according to statutory limitations; and that the necessary equipment would be used to insure easy control without any waste of gas.

Dr. Smith attacked the report of the committee, stating that it was too unilateral and failed to take into account the viewpoint of the government and that it lacked the cooperative spirit that was present in the agreement drawn up by the Middle Dome operators.

Dr. Smith also stated that it was the desire of the Secretary of the Interior first to perfect and stabilize titles of operators and to strengthen their equities, and second to follow the policy of President Hoover in conserving natural resources.

Because of the opposition of Dr. Smith, the operators decided to refer the report back to the committee, together with a suggestion offered by R. E. Collom of the Marland Oil Company of California.

Mr. Collom's suggestion stated that he was in favor of stopping the drill with the setting of the last string of casing above the oil sand or with the tapping of the oil sand itself, and that his company was not in accord with the report offered by the committee.

The meeting adjourned with the adoption of a motion that the committee report, together with Mr. Collom's suggestion, be referred back to the committee, which would work with Dr. Otis Smith to develop some plan that would be acceptable to both the operators and to the government.

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erations on the productive North Dome has been sought by the interior department without fully ironing out the problems involved.

Operators owning permits on which extensions are nearing the final limit of nine years have been unwilling to forego development which might invalidate existing rights. They are insisting on drilling to discovery in protection of their rights, but are described as generally willing to shut down after making discovery under federal requirements and thereby validating permits into leaseholds. This problem remains to be worked out independent of the gas control law.

Commenting on his announcement of June 22 releasing operators from compliance with proration orders Mr. Van Deinse explained that this action was taken in fairness to those operators who have backed him in his unsuccessful efforts to curtail oil production in California.

Lack of support by some major companies and by a large number of small companies was a reason given by Mr. Van Deinse for the failure of the curtailment plan. Another reason was the large flush production from several Los Angeles Basin fields. Mr. Van Deinse also intimated that the fact that Oklahoma had given up voluntary proration made its enforcement in California more difficult.

However, many major producers have announced their intention of continuing to exercise restraint in their production programs, pending enforcement of the new California gas conservation act.

Cessation of curtailment plans comes just at a time when they are most needed. California daily average production nearly reached the 850,000 barrel mark last week and is expected to exceed that figure for week ending June 29. Flush production in the Santa Fe Springs field, a town-lot area, has always been a menace to proration orders, because a large part of the producing wells belong to operators who have paid practically no heed to any order.

Failure on the part of Kettleman Hills operators to reach an agreement to suspend drilling in that potentially highly productive area means that there will be several completions on the North Dome within a few weeks at the most, and that before August 31, when the new law is to become effective, a number of the 26 wells now drilling in that area will be completed. It is possible that, before actual enforcement of the conservation law is effected, California's daily average production will reach the million barrel mark.

Mr. Van Deinse and his assistants will devote their attention to serving the industry by assisting in the formulation of plans for handling the surplus gas in the various oil fields of the state, so that when the gas conservation bill goes into effect there will be as little disturbance as possible.

Realizing that considerable time will be required for the California state department of oil and gas to gather sufficient data to enable its officials to put into effect the requirements of the new statute, Fred G. Stevenot, director of the state department of natural resources, has issued a notice that if, after August 31, 1929, any natural gas is being blown into the air and thus wasted, it is the intention and purpose of the state authorities immediately to proceed with all means provided by the law to prevent this wastage. Mr. Stevenot's notice gives the lessors and operators interested in any field a full 60 days time within which to make arrangements to meet the provisions of the new law.

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**More Offices Required**

BARTLESVILLE, June 29.—The Phillips Petroleum Co. has leased the second floor of the Pemberton building, near the company's office building, and will move the marketing and accounting departments to the new location about July 1.

Several new employes will be added in the Oklahoma retail marketing department, which is under the direction of H. Roy Cunningham. The marketing department has been expanding rapidly since the company entered the retail station business.

The move will take about 50 employes away from the main office building and relieve the present crowded conditions there.

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RICHMOND, Va., July 1.—Gulf Refining Co. has purchased the service station of M. E. Deitz on Wilkinson boulevard at Gastonia, N. C. Earlier this year it purchased the T. L. Craig and J. B. Boyd properties in that town, upon which it will build filling stations, according to reports.

# Danger of Overbuilding One-Stops Seen By Major Oil Company Executives

By Roger B. Stafford
N. P. N. STAFF WRITER

NEW YORK, June 29

SALES executives of several large oil companies whose headquarters are in New York city, are not greatly concerned over the touted rapid expansion of tire dealers into the one-stop station business, but foresee danger of overbuilding.

These executives interviewed this week by NATIONAL PETROLEUM NEWS, were generally of the opinion that it is not well to put all one's eggs in one basket but better to distribute them more widely. Specifically, they believe it is better to have ten $25,000 stations in one city than one $250,000 super-service station.

Because these executives know the marketing of petroleum products, particularly gasoline and motor oil, is still in a state of flux, they are reluctant to be publicly quoted as being for or against any method of marketing their products but they discuss freely their opinions of methods of marketing which opinions are based on years of observation and experience.

They realize that the direct contact of the owner of a mercantile enterprise with his customers has many advantages over a chain station in which the customer never meets the owner, if the individual merchant is a good business man. They believe there is room for a limited number of one-stop or super-service stations but they see danger in an overbuilding of high priced stations if the trend toward one-stop service as seen by the tire industry becomes much of a rush.

"It would be a shame to go mad and put in too many one-stop stations," said the vice-president in charge of sales of one of the country's largest distributors of gasoline, which owns several super-service stations in western cities. "To put in too many stations of the super type, would bring about an overbuilt condition the same as we have had with the gasoline and oil station."

Two super-service stations can do all the possible business in a town of 10,000 or 15.000 population, this vice-president pointed out, yet six great tire companies are considering going into or helping their dealers to get into the super-service station business.

"But the tire people say they will not go into a market in which they believe a one-stop station is not warranted by the trade outlook," it was suggested.

"Competition may force them to do many things they are not planning now to do," he replied. "If all the tire companies go in nobody can do a good business."

This executive's attention was called to the many rumors that one large manufacturer of tires might later go into the oil business to supply the chain of one-stop stations it and its dealers were building.

"That would not be a very good proposition," he said. He explained that it would require a tremendous outlay of money, that crude oil would not be as freely available a few years hence as today, and that no refinery could be so situated that it could serve a chain of stations over a wide territory.

"If the tire companies attempted to put out their own brand of gasoline they would be at a disadvantage," one executive said. "They would not have the advantage of a widely distributed brand. They could not depend on cut prices to get their gasoline trade because the spread on gasoline is too narrow.

"We could get into the tire business more easily but we do not want to do so, we could also operate a lot of super-service stations. I think the tire dealers, in that respect, are probably better merchandisers than the oil companies.

"If an oil company does decide to go into super-service and sell tires it could carry one or several brands of tires but it is better that it convert one of its present stations to super-service than build a big new station.

"The big supers do not justify the investments made in them. The outlying filling stations are going to stay as nobody is going to drive a considerable distance just to patronize a super station.

"This brings up the question of what attracts trade. An automobile owner buys tires only an average of once a year but he buys gasoline an average of once a week.

"Our company has no definite policy about the super type station and is not attempting to develop any policy. However, we are watching the way things move."

"THE cost of our stations averages between $10,000 and $15,000 each," said a vice-president of another large company. "We can put in close to 20 service stations for the price of one elaborate one-stop station centrally located. We are sure that we can sell a great deal more gasoline at a far better return on the investment at the 20 stations than we would at one station."

This company buys its real estate on a basis of not more than $10 for each barrel of gasoline it expects to sell at a particular location in a year. For example, it believes it can afford to pay $100,000 for a site where it would sell 10,000 barrels or 420,000 gallons of gasoline in a year, or $50,000 for a site where it would sell 5,000 barrels or 210,000 gallons a year. Some of its sites have cost more than $10 a barrel but those

## These Opinions Represent Nation-Wide Markets

THE oil company executives whose views about the one-stop, or super-service station, movement are presented in the accompanying article, represent outlets for gasoline and motor oil in every state in the United States.

In all, five high oil company officials were interviewed and also two men who have made years of study of tire industry merchandising problems. Companies of some of the oil company men interviewed are now supplying many tire dealers' stations with gasoline and oils.

These men believe that no one best method of marketing of gasoline and oil has yet been found and that it has not been definitely determined whether other automotive service should be coupled with the sale of gasoline and motor oils by means of one-stop stations under one management.

sites have some peculiar advantage worth the additional outlay required.

A good many gasoline and motor oil distributors in New York and New England territory have taken on the sale of tires in the last year or so but the average sale is reported in New York to be less than one tire a day per station.

Perhaps the largest gasoline and oil distributor to engage in the sale of tires is the Beacon Oil Co., which has been in the tire business only about a month. It is yet too early to appraise the worth of this business, R. B. Kahle, president of Beacon, told NATIONAL PETROLEUM NEWS.

Beacon handles only the sizes for which there is steady demand, Mr. Kahle said. Investigation showed that 10 sizes formed about 80 per cent of the business and that five additional sizes did 5 per cent more of the tire business. The remaining 15 per cent of the business took 65 different sizes which the company is not stocking.

Beacon's tires carry the company's own brand name and are made for the company by different tire manufacturers under contract. Its stations are equipped to change tires, Mr. Kahle said, but it lets out its repair work to local vulcanizers.

Beacon also is carrying about 20 items of automobile day-to-day necessities and lately it has put in some candy and cigaret vending machines as an experiment. The Standard Oil Co. of Pennsylvania, Beacon's sister subsidiary of the Standard Oil Co. of New Jersey, is also experimenting with a few vending machines in Harrisburg, Pa.

A New York man who has studied the merchandising of automobile tires for years, is skeptical about the profits of a great number of large one-stop stations which depend on tires, batteries, gasoline, oils, lubrication and car washing for a livelihood.

"A station that costs $200,000 for land, buildings and equipment should do a gross business at least $200,000 a year to be profitable," said this merchandising man who classifies as an expert. "The station should sell at least $100,000 a year in tires from which it should receive its largest revenue. It should do about half that amount in gasoline and oil and 12 per cent of the tire business in its batteries. That leaves 19 per cent or $38,000 which it must derive from services—tire repairing, battery charging, car lubrication and washing.

"On the basis of the $800,000,000 replacement tire business in the United States in 1928, there is room for only 8000 one-stop service stations in the country. I can't see where any more can be profitable if the stations are to be built on the scale of many of the new tire dealers' stations."

Gasoline and oil sales may run higher than this man estimated. If a station can sell an average of 30,000 gallons of gasoline a month its gross return on the gasoline should be about $75,000 a year at present gasoline prices. If it can sell 3 per cent as many gallons of motor oil as it sells gasoline and sell the motor oil at 30 cents a quart, it could bring in approximately $13,000 more to the credit of its petroleum products department.

"And if a one-stop station can sell 30,000 gallons a month we'll be content to sell them the gasoline and not bother with super station operation ourselves," most of the oil company sales executives agreed.

# Denies Threats of Withdrawal from Export Group

NEW YORK, June 29

REPORTS that internal dissension was about to cause a rift in the newly formed Export Petroleum Association, Inc., were met this week with a denial in the form of a memorandum to the press by Gilbert H. Montague, vice-president and general counsel of the association.

The reports were that most of the members of the association wished to increase the export price of gasoline 1 cent a gallon but that two or three members opposed it. It is common talk in New York oil trade circles that one member threatened to withdraw unless the price was increased. Who this member was could not be learned and Mr. Montague would say nothing. Only the previously prepared statement was given the press. This statement follows:

"The Export Petroleum Association, Inc., following its customary procedure in all matters regarding gasoline export prices, recently appointed a committee of its member companies to investigate and report back to the association the committee's recommendations on this subject.

"At its meeting the association voted that this export price committee should continue its investigation of the gasoline situation and that action by the association regarding gasoline export prices should be deferred until after this committee had reported back the results of its investigation and its recommendation.

"This resolution received the hearty assent and the vote of every member company in the association, except for one or two member companies whose representatives on the association's board of directors were not present.

"No proposal regarding gasoline export prices other than the above was discussed at the meeting.

"No member company of the association has at any time or in any manner ever expressed or indicated any disposition to withdraw from the association.

"The association has shown marked progress in its work upon the highly complicated problems confronting the American gasoline export trade, and at each successive meeting the member companies have shown an increasing disposition to cooperate with one another in the solution of these problems."

The companies that balked at the increase in gasoline price at this time, are said to be the Shell Union Oil Corp., and the Vacuum Oil Co.

At the meeting of the association's directors in New York June 27 it is known that a cablegram from Sir Henri Deterding, managing director of the Royal Dutch-Shell interests, was presented. In it Sir Henri, on whom hinged the proposal of increasing the price of gasoline, is understood to have disapproved an increase at this time.

However, the proposal for the 1-cent advance was submitted to a committee of the association which is understood to be making a study of world gasoline markets. Mr. Montague would not divulge the personnel or the exact function of this committee.

Following the directors' meeting June 27, Mr. Montague held a conference at the Standard Oil Co. of New Jersey which company took the lead last fall in getting the association organized. At the Standard's offices it was said any information pertaining to the association would have to come from Mr. Montague.

Original members of the association are: Atlantic Refining Co.; Gulf Refining Co.; Cities Service Oil Co.; Shell Union Oil Corp.; Sinclair Consolidated Oil Corp.; Standard Oil Export Co. (Standard of New Jersey group); Standard Oil Co. of New York; Tide Water Associated Oil Co.; The Texas Corp.; Vacuum Oil Co.; Richfield Oil Co.; Union Oil Co. of California; Standard Oil Co. of California; Continental Oil Co. of Delaware (Maryland), and Standard Oil Co. of Indiana.

*This Brockway-Indiana ton and half truck, with the tank trailer shown, made the best time in the hill climbing test near Oil City*

# Truck-Tank Trailer Units Demonstrated In Pennsylvania Hills

OIL CITY, Pa., July 2

UP A HILL, in same Deep Hollow near Oil City, where 40 to 50 years ago horses and mules pulled casing and pipe to well locations in the then new oil fields of Pennsylvania, eleven trucks raced June 27, demonstrating a new type of transportation of oil products.

This was a competitive test on hill climbing ability of the new combination truck-trailer hauling units which are now being put into actual hauling service by oil marketing companies in many places.

Two and three-ton truck tanks are replaced by a lighter ton, or a ton and a half hauling unit, of standard model, in combination with a two-wheel tank trailer, with auxiliary wheels in front that drop down to support that end of the trailer when the truck is not attached.

While the hill climbing tests of which this one at Oil City was the second conducted under the auspices of an oil company, demonstrate the hauling power of the new combination outfits, lower delivery cost per gallon, greater delivery radius because of their greater speed and easier handling in traffic are also claimed as features of these units.

This test at Oil City was arranged by the Pennzoil Co., refiners and distributors with headquarters here, under the direction of Lawrence Meade, manager of automotive equipment for the company, and John G. Peirce, of the same company. A crowd of several hundred watched the tests, made up of representatives from the truck and trailer companies, with a good number of men from oil companies in this district.

The test was a mile stretch on a hill with a maximum grade of 17 per cent. It was a cinder road, well crowned, but not very smooth, with a 90-degree left turn between 2400 and 2500 feet and a right hand turn of about 60 degrees between 3800 and 3900 feet.

The trucks participating in the test were standard models, none being over a ton and half rated capacity. The following makes were in the test: Diamond T, Ford, G.M.C., Federal, Chevrolet, Selden, Autocar, Atterbury, Stewart, International, Brockway-Indiana.

But one type of trailer equipment was used by all trucks. This was a three-ton Fruehauf drop frame, semi-trailer, made especially for oil industry use. It has been in service for the Pennzoil Co. It carries a Davis-bilt "Clipper" tank, four compartments, with 750 gallons' capacity.

The weight of the tank was given as 3140 pounds; trailer 2300 pounds; gasoline, 765 gallons at 6.3 pounds to the gallon, 4819 pounds; lubricating oil, 60 gallons in cans, oil and cans weighing close to 600 pounds. All told this was a weight of over 5 tons in trailer and load that each of the eleven trucks pulled up the Deep Hollow hill.

THE Brockway-Indiana truck made the best time on the test four minutes and 55 seconds; the Stewart was second with five minutes and 27 seconds and the Federal third with five minutes and 33 seconds. Slowest time of any of the eleven was a little over nine minutes.

Cooperating with the Pennzoil officials in the test were: W. E. Fletcher, of the Fruehauf Trailer Co.; J. Paul Aland, of the Dravo Equipment Co., Fruehauf distributor, and H. L. Lowry, Davis Welding & Mfg.

*(Continued on Page 33)*

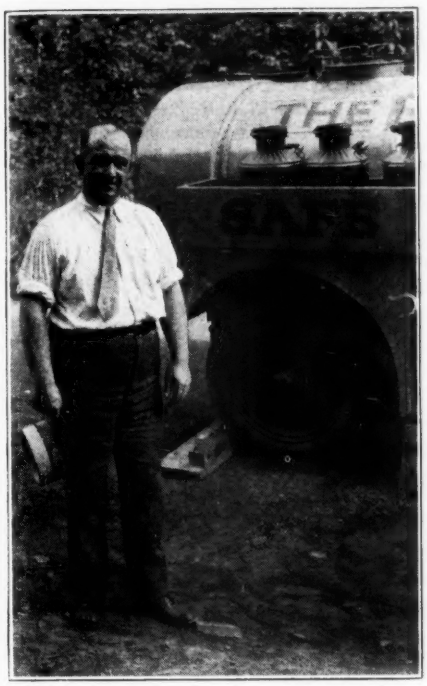
# Competitive Truck-Trailer Test Conducted by Pennzoil Co., June 27, 1929, Oil City

| Distance Feet | Grade Per Cent | STEWART Time | STEWART Gear | AUTOCAR Time | AUTOCAR Gear | FEDERAL Time | FEDERAL Gear | ATTERBURY Time | ATTERBURY Gear | CHEVROLET Time | CHEVROLET Gear | BROCKWAY Time | BROCKWAY Gear | Distance Feet |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 11 | 12s | 2 | 10s | 1 | 5s | 1 | 13s | 1 | 9s | 1 | 8s | 1 | 100 |
| 200 | 7 | 24s | 2 | 14s | 2 | 18s | 1 | 25s | 1 | 20s | 1 | 18s | 1 | 200 |
| 300 | 8 | 38s | 2 | 36s | 2 | 23s | 2 | 36s | 2 | 30s | 1 | 27s | 2 | 300 |
| 400 | 5 | 48s | 2 | 44s | 2 | 27s | 1 | 47s | 2 | 39s | 1 | 34s | 2 | 400 |
| 500 | 5 | 57s | 2 | 51s | 2 | 35s | 1 | 58s | 2 | 48s | 2 | 40s | 2 | 500 |
| 600 | 4 | 1m 8s | 2 | 55s | 2 | 45s | 1 | 1m 5s | 2 | 53s | 2 | 46s | 2 | 600 |
| 700 | 2 | 19s | 2 | 1m 4s | 3 | 52s | 1 | 12s | 3 | 1m 1s | 2 | 51s | 3 | 700 |
| 800 | 2 | 22s | 2 | 10s | 3 | 55s | 2 | 20s | 3 | 6s | 2 | 55s | 3 | 800 |
| 900 | 3 | 26s | 3 | 15s | 3 | 1m 5s | 2 | 26s | 3 | 11s | 2 | 1m 0s | 3 | 900 |
| 1000 | 2 | 29s | 3 | 20s | 3 | 12s | 2 | 31s | 4 | 16s | 2 | 3s | 3 | 1000 |
| 1100 | 1½ | 32s | 3 | 25s | 3 | 16s | 2 | 38s | 4 | 21s | 2 | 7s | 3 | 1100 |
| 1200 | 3 | 35s | 3 | 30s | 3 | 21s | 3 | 45s | 4 | 27s | 2 | 10s | 3 | 1200 |
| 1300 | 3 | 38s | 3 | 34s | 3 | 23s | 3 | 52s | 4 | 31s | 2 | 13s | 3 | 1300 |
| 1400 | 3 | 41s | 3 | 37s | 3 | 30s | 3 | 59s | 4 | 36s | 2 | 16s | 3 | 1400 |
| 1500 | 3½ | 43s | 3 | 42s | 3 | 33s | 3 | 2m 7s | 4 | 41s | 2 | 20s | 3 | 1500 |
| 1600 | 4 | 45s | 3 | 45s | 3 | 38s | 3 | 17s | 3 | 46s | 2 | 24s | 3 | 1600 |
| 1700 | 4 | 47s | 3 | 50s | 3 | 42s | 3 | 25s | 3 | 51s | 2 | 27s | 3 | 1700 |
| 1800 | 7 | 49s | 3 | 53s | 3 | 45s | 3 | 32s | 2 | 56s | 2 | 30s | 3 | 1800 |
| 1900 | 3 | 51s | 3 | 55s | 3 | 48s | 3 | 43s | 2 | 2m 1s | 2 | 35s | 3 | 1900 |
| 2000 | 4 | 54s | 3 | 2m 35s | 3 | 52s | 3 | 55s | 3 | 7s | 2 | 37s | 3 | 2000 |
| 2100 | 7½ | 57s | 3 | 10s | 2 | 58s | 3 | 59s | 3 | 11s | 2 | 40s | 3 | 2100 |
| 2200 | 7½ | 2m 0s | 3 | 15s | 2 | 2m 0s | 3 | 3m 7s | 2 | 16s | 2 | 46s | 3 | 2200 |
| 2300 | 4 | 4s | 3 | 22s | 2 | 3s | 3 | 22s | 1 | 24s | 2 | 50s | 3 | 2300 |
| 2400 | 2 | 10s | 3 | 33s | 2 | 8s | 2 | 35s | 1 | 30s | 2 | 54s | 3 | 2400 |
| 2500 | 3 | 15s | 3 | 40s | 2 | 15s | 2 | 46s | 2 | 38s | 2 | 2m 0s | 2 | 2500 |
| 2600 | 7½ | 18s | 3 | 43s | 2 | 22s | 2 | 58s | 3 | 44s | 2 | 5s | 2 | 2600 |
| 2700 | 13 | 20s | 3 | 45s | 1 | 28s | 2 | 4m 3s | 2 | 48s | 1 | 9s | 2 | 2700 |
| 2800 | 11 | 28s | 2 | 59s | 1 | 33s | 1 | 21s | 1 | 58s | 1 | 16s | 2 | 2800 |
| 2900 | 8 | 38s | 2 | 3m 10s | 2 | 41s | 1 | 34s | 1 | 3m 9s | 1 | 25s | 2 | 2900 |
| 3000 | 13 | 49s | 2 | 23s | 1 | 50s | 1 | 47s | 2 | 17s | 1 | 33s | 2 | 3000 |
| 3100 | 14 | 58s | 1 | 38s | 1 | 57s | 1 | 5m 3s | 1 | 30s | 1 | 41s | 2 | 3100 |
| 3200 | 17 | 3m 11s | 1 | 48s | 1 | 3m 5s | 1 | 22s | 1 | 42s | 1 | 50s | 2 | 3200 |
| 3300 | 12 | 25s | 2 | 4m 3s | 1 | 17s | 1 | 45s | 1 | 56s | 1 | 3m 1s | 2 | 3300 |
| 3400 | 11 | 35s | 2 | 14s | 1 | 29s | 1 | 6m 0s | 1 | 4m 7s | 1 | 10s | 2 | 3400 |
| 3500 | 11 | 45s | 2 | 25s | 2 | 40s | 2 | 12s | 1 | 17s | 1 | 17s | 1 | 3500 |
| 3600 | 11 | 54s | 2 | 36s | 1 | 48s | 1 | 21s | 2 | 28s | 1 | 25s | 1 | 3600 |
| 3700 | 11 | 4m 2s | 2 | 49s | 1 | 57s | 1 | 40s | 1 | 39s | 1 | 35s | 1 | 3700 |
| 3800 | 11 | 13s | 2 | 5m 10s | 1 | 4m 5s | 1 | 55s | 1 | 49s | 1 | 44s | 2 | 3800 |
| 3900 | 7 | 23s | 2 | 23s | 2 | 15s | 1 | 7m 8s | 1 | 5m 0s | 1 | 52s | 2 | 3900 |
| 4000 | 9 | 30s | 2 | 30s | 2 | 25s | 2 | 18s | 1 | 7s | 2 | 59s | 2 | 4000 |
| 4100 | 6 | 36s | 2 | 39s | 1 | 33s | 2 | 30s | 1 | 16s | 2 | 4m 5s | 2 | 4100 |
| 4200 | 5 | 44s | 2 | 56s | 2 | 38s | 2 | 42s | 1 | 25s | 2 | 10s | 2 | 4200 |
| 4300 | 5 | 52s | 3 | 6m 7s | 2 | 44s | 2 | 54s | 1 | 31s | 2 | 16s | 2 | 4300 |
| 4400 | 4 | 5m 0s | 3 | 13s | 3 | 48s | 2 | 8m 4s | 2 | 36s | 2 | 21s | 3 | 4400 |
| 4500 | 4½ | 9s | 3 | 23s | 3 | 54s | 2 | 12s | 3 | 43s | 2 | 25s | 3 | 4500 |
| 4600 | 2 | 12s | 3 | 30s | 3 | 5m 5s | 3 | 20s | 3 | 47s | 2 | 30s | 3 | 4600 |
| 4700 | 1 | 14s | 3 | 37s | 1 | 8s | 3 | 27s | 3 | 52s | 2 | 34s | 3 | 4700 |
| 4800 | 4 | 16s | 3 | 55s | 1 | 12s | 3 | 34s | 3 | 86s | 2 | 38s | 3 | 4800 |
| 4900 | 3 | 18s | 3 | 7m 2s | 2 | 17s | 3 | 42s | 3 | 6m 3s | 2 | 41s | 3 | 4900 |
| 5000 | 6 | 21s | 3 | 7s | 2 | 22s | 3 | 48s | 3 | 6s | 2 | 45s | 3 | 5000 |
| 5100 | 5 | 23s | 3 | 13s | 2 | 26s | 3 | 55s | 3 | 12s | 2 | 49s | 3 | 5100 |
| 5200 | 5 | 25s | 3 | 23s | 1 | 30s | 3 | 9m 4s | 3 | 17s | 3 | 52s | 3 | 5200 |
| 5280 | 5 | 27s | 3 | 37s | 1 | 33s | 3 | 11s | 3 | 21s | 3 | 55s | 3 | 5280 |
| Total Time | | 5m 27s | | 7m 37s | | 5m 33s | | 9m 11s | | 6m 21s | | 4m 55s | | |

| Distance Feet | Per Cent Grade | Seldon Time | Seldon Gear | Ford Time | Ford Gear | Diamond T Time | Diamond T Gear | G. M. C. Time | G. M. C. Gear | International Time | International Gear | Distance Feet |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 11 | 7s | 2 | 8s | 2 | 10s | 2 | 7s | 2 | 9s | 2 | 100 |
| 200 | 7 | 16s | 2 | 18s | 2 | 25s | 2 | 17s | 1 | 19s | 1 | 200 |
| 300 | 8 | 23s | 2 | 28s | 2 | 37s | 2 | 26s | 1 | 24s | 1 | 300 |
| 400 | 5 | 31s | 2 | 37s | 2 | 46s | 2 | 35s | 1 | 37s | 1 | 400 |
| 500 | 5 | 40s | 2 | 46s | 2 | 56s | 3 | 43s | 1 | 45s | 1 | 500 |
| 600 | 4 | 45s | 2 | 53s | 2 | 1m 5s | 3 | 50s | 2 | 52s | 2 | 600 |
| 700 | 2 | 52s | 2 | 59s | 2 | 14s | 3 | 57s | 2 | 57s | 2 | 700 |
| 800 | 2 | 57s | 2 | 1m 5s | 2 | 20s | 3 | 1m 2s | 2 | 1m 2s | 2 | 800 |
| 900 | 3 | 1m 1s | 2 | 9s | 2 | 25s | 3 | 6s | 3 | 7s | 2 | 900 |
| 1000 | 2 | 5s | 2 | 14s | 2 | 30s | 4 | 11s | 3 | 11s | 2 | 1000 |
| 1100 | 1½ | 10s | 2 | 20s | 2 | 35s | 4 | 15s | 3 | 16s | 2 | 1100 |
| 1200 | 3 | 15s | 2 | 25s | 2 | 41s | 4 | 19s | 3 | 20s | 2 | 1200 |
| 1300 | 3 | 19s | 2 | 30s | 2 | 47s | 3 | 23s | 3 | 25s | 2 | 1300 |
| 1400 | 3 | 23s | 2 | 35s | 2 | 54s | 3 | 27s | 3 | 29s | 2 | 1400 |
| 1500 | 3½ | 27s | 2 | 40s | 2 | 2m 0s | 3 | 30s | 3 | 33s | 2 | 1500 |
| 1600 | 4 | 30s | 2 | 45s | 2 | 5s | 3 | 34s | 3 | 37s | 2 | 1600 |
| 1700 | 4 | 36s | 2 | 50s | 2 | 10s | 3 | 38s | 3 | 41s | 2 | 1700 |
| 1800 | 7 | 40s | 2 | 55s | 2 | 15s | 3 | 41s | 3 | 45s | 2 | 1800 |
| 1900 | 3 | 45s | 2 | 2m 0s | 2 | 21s | 3 | 45s | 3 | 50s | 2 | 1900 |
| 2000 | 4 | 50s | 2 | 5s | 1 | 27s | 3 | 49s | 3 | 55s | 2 | 2000 |
| 2100 | 7½ | 56s | 2 | 10s | 1 | 33s | 3 | 53s | 3 | 2m 0s | 2 | 2100 |
| 2200 | 7½ | 2m 3s | 2 | 15s | 1 | 39s | 3 | 56s | 3 | 5s | 2 | 2200 |
| 2300 | 4 | 13s | 1 | 23s | 1 | 47s | 3 | 2m 1s | 2 | 12s | 2 | 2300 |
| 2400 | 2 | 20s | 1 | 31s | 1 | 57s | 2 | 7s | 2 | 20s | 2 | 2400 |
| 2500 | 3 | 27s | 1 | 40s | 1 | 3m 6s | 2 | 15s | 2 | 26s | 2 | 2500 |
| 2600 | 7½ | 34s | 1 | 48s | 1 | 15s | 2 | 20s | 2 | 30s | 2 | 2600 |
| 2700 | 13 | 40s | 1 | 55s | 1 | 25s | 2 | 25s | 2 | 36s | 2 | 2700 |
| 2800 | 11 | 48s | 1 | 3m 5s | 1 | 40s | 2 | 32s | 2 | 45s | 1 | 2800 |
| 2900 | 8 | 57s | 1 | 15s | 1 | 55s | 2 | 41s | 1 | 55s | 1 | 2900 |
| 3000 | 13 | 3m 4s | 1 | 24s | 1 | 4m 10s | 2 | 50s | 1 | 3m 4s | 1 | 3000 |
| 3100 | 14 | 13s | 1 | 35s | 1 | 26s | 1 | 59s | 1 | 13s | 1 | 3100 |
| 3200 | 17 | 25s | 2 | 47s | 1 | 43s | 1 | 3m 8s | 1 | 24s | 1 | 3200 |
| 3300 | 12 | 4m 53s | 1 | 4m 2s | 1 | 5m 0s | 1 | 19s | 1 | 36s | 1 | 3300 |
| 3400 | 11 | 5m 9s | 1 | 14s | 1 | 15s | 1 | 29s | 1 | 47s | 1 | 3400 |
| 3500 | 11 | 19s | 1 | 24s | 1 | 30s | 1 | 38s | 1 | 56s | 1 | 3500 |
| 3600 | 11 | 29s | 1 | 35s | 1 | 45s | 1 | 46s | 1 | 4m 6s | 1 | 3600 |
| 3700 | 11 | 38s | 1 | 46s | 1 | 6m 1s | 1 | 55s | 1 | 16s | 1 | 3700 |
| 3800 | 11 | 50s | 1 | 57s | 1 | 16s | 1 | 4m 5s | 1 | 27s | 1 | 3800 |
| 3900 | 7 | 6m 0s | 1 | 5m 8s | 1 | 30s | 1 | 14s | 1 | 35s | 1 | 3900 |
| 4000 | 9 | 6s | 1 | 15s | 2 | 44s | 2 | 21s | 1 | 42s | 1 | 4000 |
| 4100 | 6 | 14s | 1 | 23s | 2 | 59s | 2 | 29s | 1 | 50s | 1 | 4100 |
| 4200 | 5 | 20s | 1 | 31s | 2 | 7m 13s | 2 | 37s | 1 | 56s | 2 | 4200 |
| 4300 | 5 | 30s | 2 | 38s | 2 | 27s | 2 | 44s | 1 | 5m 2s | 2 | 4300 |
| 4400 | 4 | 39s | 2 | 45s | 2 | 41s | 2 | 51s | 2 | 7s | 2 | 4400 |
| 4500 | 4½ | 45s | 2 | 50s | 2 | 49s | 2 | 57s | 2 | 14s | 2 | 4500 |
| 4600 | 2 | 50s | 3 | 55s | 2 | 58s | 2 | 5m 2s | 2 | 19s | 3 | 4600 |
| 4700 | 1 | 54s | 3 | 6m 0s | 2 | 8m 4s | 2 | 6s | 2 | 22s | 3 | 4700 |
| 4800 | 4 | 59s | 3 | 5s | 2 | 9s | 2 | 12s | 2 | 27s | 3 | 4800 |
| 4900 | 3 | 7m 3s | 3 | 9s | 3 | 15s | 2 | 16s | 3 | 31s | 3 | 4900 |
| 5000 | 6 | 6s | 3 | 15s | 3 | 20s | 2 | 21s | 3 | 36s | 3 | 5000 |
| 5100 | 5 | 10s | 3 | 20s | 3 | 25s | 2 | 26s | 3 | 41s | 3 | 5100 |
| 5200 | 5 | 14s | 3 | 25s | 3 | 30s | 2 | 31s | 3 | 45s | 3 | 5200 |
| 5280 | 5 | 18s | 3 | 29s | 3 | 34s | 2 | 35s | 3 | 49½s | 3 | 5280 |
| Total Time | | 7m 18s | | 6m 29s | | 8m 34s | | 5m 35s | | 5m 49½s | | Total Time |

## Data on Trucks in the Oil City Hill Climbing Test

| Make of Truck | Diamond T | Ford | G. M. C. | Federal | Chevrolet | Selden | Autocar | Atterbury | Stewart | International | Brockway Indiana |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rated Capacity Tons.... | 1½ | 1½ | 1½ | 1½ | 1½ | 1½ | 1½ | 1½ | 1½ | 1¼ | 1½ |
| Motor Bore Inches..... | 3¾ | 3⅞ | 3⅛ | 3⅜ | 3⅛ | 3⅜ | 3⅜ | 3¼ | 3¼ | 3¼ | 3⅜ |
| Motor Stroke Inches.... | 4 | 4¼ | 3⅞ | 4⅝ | 3¾ | 4 | 4½ | 4½ | 4½ | 4½ | 4⅝ |
| Standard Model..... | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Gear Ratio..... | 6 3/7-1 | 7 1/11-1 | 6. 83-1 | 5-5/6 | 39-12-1 | 5-8-1 | 6¼-1 | 6. 3 | Optional | 6-12-1 | 6-3 |
| Size Tires Front..... | 32x6 | 30x5 | 30x5 | 30x5 | 30x5 | 30x5 | 30x5 | 30x5 | 30x5 | 30x5 | 30x5 |
| Size Tires Rear..... | 32x6 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual | 30x5 Dual |
| Wheel Base Inches..... | 157 | 121½ | 126¾ | 132 | 126 | 142 | 138 | 145 | 132 | 130 | 137 |
| Type of Transmission.... | Single | Dual | Single | Single | Dual | Single | Single | Single | Single | Single | Sgl. 4-speed |
| Type of Brakes..... | Hydraulic | 4 wheel Mechanical | 4 Wheel Bendix | Lockhead Hydraulic | Van Dorn Axle 4 Wheel Bendix | Hydraulic Lockhead | Front Lockhead Hydraulic Rear Autocar Mechanical | Lockhead Hydraulic | 4 Wheel Bendix | Mechanical | 4 Wheel Mechanical |



*Lawrence Meade, manager of automotive equipment for the Pennzoil Co., Oil City, who arranged the truck-trailer hill climbing test near Oil City*

Co. Arthur Watson, of the Fruehauf company, handled the coupling of the trailer to the trucks.

Among the oil company men watching the tests and giving a hand now and then was S. A. White, purchasing agent of the National Refining Co., Cleveland, who arranged and superintended the first demonstration of this kind, which took place on the Gates Mill hill near Cleveland, a few months ago.*

Other oil men present were: R. S. Newton, Sterling Oil Co., Emlenton; R. P. Allison, Waverly Oil Works, Pittsburgh; G. J. Mohr, Freedom Oil Works, Freedom; J. J. Fox, J. R. French, H. E. Denton, R. S. Hunter, R. F. McFarland, B. W. Leach, Pennzoil Co., Oil City; W. L. Schopene, Pittsburgh; Clarence Halloran, C. J. Ball, Bruin Oil Co., Butler; H. W. Bunning, Cities Service Oil Co., Cleveland; James Johnston, Hyvis distributor, Wampum, and Daniel Morrow, Waverly distributor, New Castle.

*See April 24, 1929, issue of NATIONAL PETROLEUM NEWS, page 32; May 1 issue, page 10 B; May 15 issue, page 93.

# Continental Officials Begin Long Trip

PONCA CITY, July 3.—Twenty-two officers and department heads of the Continental Oil Co. started July 2 on a 5500-mile trip by specially equipped bus for a visit of inspection of properties which came into the new Continental company through the recent Continental-Marland merger.

Beginning at Ponca City, where executives from Denver assembled with those resident in Ponca City, the trip was begun which was to take them to the principal district offices in Oklahoma, Texas, New Mexico, Arizona, Colorado, Utah, Montana, Wyoming, Nebraska and Kansas. The schedule called for an average of 260 miles daily for 21 days.

Those making the trip are: D. J. Moran, president; E. T. Wilson, chairman of the board; S. H. Keoughan, chairman executive committee; E. J. Nicklos, vice-president; Walter Miller, vice-president; W. H. Ferguson, vice-president; E. S. Karstedt, vice-president; B. H. Markham, comptroller; O. B. Lloyd, sales; J. J. Cosgrove, chief counsel; Harry Moreland and Tom Kenney, pipe line; E. O. Bennett, engineering; G. C. Clark, geological; J. M. Hollister, general manager plants and equipment; H. B. Simcox, production; E. C. Halsey, manager service stations; Fred Searles, director; J. C. Curtiss, sales; Emerson Smith, publicity; T. D. Harris, motor transportation; S. J. Trilling, secretary.

John L. Wilson, representative of the Mack Truck Co., supplying the bus also is making the tour.

The first day's trip included stops in Tulsa and Sapulpa, with overnight stay in Oklahoma City. Wichita Falls was the objective for the second day, with night stop there. Following these the points to be visited were:

Big Spring, Tex., Artesia, Carlsbad, Albuquerque, Farmington and Shiprock, N. M.; Durango, Florence, Pueblo, Denver, Fort Collins and Steamboat Springs, Colo.; Salt Lake City; Butte, Great Falls, Lewistown and Billings, Mont.; Cody, Sheridan, Casper, Lusk, Douglas and Glenrock, Wyo.; North Platte and Lincoln, Neb. and Kansas City.

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CLEVELAND, June 29.—Charles L. Lockett, of Maracaibo, Venezuela, district manager in Colombia, Venezuela, and Trinidad for the International Derrick & Equipment Co. has returned to the United States for a short vacation. Mr. Lockett is well known throughout the Mid-Continent. Before going to South America he was in charge of the Denver office for Ideco.

*Bus in which Continental executives are making trip*

# 90 Per Cent of Refinery Capacity Covered by A.P.I. Report

By Telegraph
NEW YORK, July 2

IN RESPONSE to the request of the American Petroleum Institute for refinery statistics, companies operating 90 per cent of the refining capacity of the country submitted reports for the week ended June 28. Total capacity covered was 3,003,500 barrels out of a total estimated capacity for the U. S. of 3,338,600 barrels.

Reporting refiners were operating at 87.8 per cent of their rated capacity during the week. Total still charges were 18,463,000 barrels or 2,637,600 barrels per day. Gasoline stocks at reporting plants totaled 40,047,000 barrels and gas and fuel oil stocks 139,471,000 barrels.

In the initial report issued a week ago figures were shown for plants with 84.6 per cent of the total U. S. capacity. Stocks of gasoline at these plants on June 22 were 38,324,000 barrels and gas and fuel oil stocks totaled 134,615,000 barrels.

Following are the figures:

**American Petroleum Institute report of Refinery Operations in the United States for the week ended June 29.**

**(All figures in barrels.)**

| District | Per Cent of Capacity Reporting | Crude Run to Stills | Per Cent of Capacity Operated | Gasoline Stocks | Gas & Fuel Oil Stocks |
|---|---|---|---|---|---|
| East Coast..... | 100.0 | 3,517,700 | 88.9 | 6,731,000 | 10,298,000 |
| Appalachian..... | 85.2 | 669,600 | 96.3 | 1,198,000 | 1,074,000 |
| Ind.-Ill.-Ky..... | 98.4 | 2,257,500 | 99.6 | 6,794,000 | 3,205,000 |
| Okla.-Kan.-Mo.... | 68.2 | 1,731,100 | 85.5 | 3,943,000 | 4,036,000 |
| Texas ..... | 86.1 | 3,691,100 | 90.3 | 5,617,000 | 12,062,000 |
| La.-Ark..... | 86.7 | 1,266,800 | 82.3 | 2,168,000 | 5,488,000 |
| Rocky Mountain.. | 90.6 | 512,700 | 61.5 | 1,876,000 | 564,000 |
| California..... | 95.5 | 4,816,500 | 85.7 | 11,720,000 | 102,744,000 |
| Total U. S..... | 90.0 | 18,463,300 | 87.8 | 40,047,000 | 139,471,000 |
| Texas (Gulf Coast) | 96.2 | 2,845,800 | 94.3 | 4,770,000 | 8,118,000 |
| La. (Gulf Coast).. | 97.5 | 938,300 | 86.5 | 1,992,000 | 4,553,000 |

## S.O.N.J. Stations Won't Sell Butter and Eggs

NEW YORK, June 29.—A story published in the financial section of a Pittsburgh newspaper June 26 that the Standard Oil Co. of New Jersey would soon begin to sell groceries at its service stations, caused a lot of merriment among sales executives at 26 Broadway when the story was called to their attention.

Each denied that he was about to become a "big butter and egg man" and that for the present the company considered its petroleum business as pretty good in getting the "bacon" without taking on the Chicago staple.

A few years ago Standard did option some land it did not need at several of its stations to a company that proposed to build a chain of restaurants but this company never advanced beyond the promotion stage and the option was forfeited, it was said at the Standard offices.

### A.P.I. Provides for Welch Family

CLEVELAND, June 28.—The American Petroleum Institute has set aside a trust fund of $60,000 to care for the wife and two daughters of the late Robert L. Welch, who served the Institute as general counsel for many years.

Mrs. Welch and each of the two daughters is to be allowed $150 per month from the fund. Unused part of the fund will revert to the Institute on the death or marriage of the beneficiaries.

### R. A. Nelson Is Dead

BARTLESVILLE, June 29.—R. A. Nelson, general superintendent for the Empire Pipe Line Co., died June 26 at Kansas City. Funeral services were held at Bartlesville, where Mr. Nelson had offices, and interment was at Caney, Kans., his earlier home.

### Snyder Back With Champlin

ENID, June 29.—L. A. Snyder, who resigned several weeks ago as sales manager for Champlin Refining Co. here to become manager of sales for the Rock Island Refining Co. at Duncan, has returned to Enid as general manager of sales for Champlin.

NEW YORK, June 29.—The spot market for Venezuelan crude oil has been inactive for the past several weeks.

## Gasoline Output Gains, Stocks Down in May

(By Telegraph)

WASHINGTON, July 2.—Over 4,000,000 more barrels of crude were produced in May than in April, and nearly 3,000,000 more barrels were added to stocks, according to the U. S. Bureau of Mines summary.

Daily average production of crude was 2,723,000 barrels, compared with 2,670,300 barrels in April. Total May output was 84,415,000 barrels, a gain of 4,350,000 barrels over April.

Crude stocks east of California totaled 379,542,000 barrels, and in California 130,719,000 barrels; total of 510,261,000 barrels in storage on May 31, compared with 507,538,000 barrels in storage April 30.

Gasoline production in May, daily average, was 1,170,000 barrels, compared with 1,154,533 barrels in April. Total output for May, a 31-day month, was 36,270,000 barrels, and for April, a 30-day month, 34,636,000 barrels.

Stocks of gasoline declined 2,367,000 barrels, to 44,648,000 barrels in May. This compares with stocks of 47,015,000 barrels at the end of April.

## Papers on Refining Technic Invited by Committee

NEW YORK, June 29.—Plans already under way by the general committee on refinery technology (E. W. Isom chairman) of the American Petroleum Institute for the group sessions on refinery technology to be held at the annual meeting of the Institute next December.

Topics for group sessions tentatively chosen, according to a bulletin of the Institute, include motor fuels, vapor phase cracking and synthetic products.

District representatives have been appointed as shown below and individuals who are in position to offer papers on any phase of refinery technology or to offer suggestions as to sources of papers are urged to communicate with these representatives in their respective districts.

**District Representatives**

Atlantic Coast: L. W. Parsons, Tide Water Oil Co., East 22nd street, Bayonne, N. J.

Appalachian: W. S. Zehrung, Pennzoil Co., Oil City, Pa.

North Central: R. C. Osterstrom, Pure Oil Co., 35 East Wacker drive, Chicago.

Mid-Continent: H. W. Camp, Empire Oil & Refining Co., Tulsa.

Gulf Coast: Brian Mead, Humble Oil & Refining Co., Baytown, Tex.

Rocky Mountain: S. H. Diggs, Midwest Refining Co., Casper, Wyo.

Pacific Coast: R. E. Haylett, Union Oil Co., 617 West Seventh street, Los Angeles.

# Review of Late Production News

THE twelfth new production peak this year was reached the week ended June 29 when the country's daily average soared to 2,815,400 barrels. This is the first time that production has been over the 2,800,000 barrel mark. It is a gain of 50,900 barrels over the previous week, according to the American Petroleum Institute.

Crude oil imports were at the rate of 276,857 barrels daily, a gain of 68,286 barrels over the previous week. Total new crude supply reached 3,092,257 barrels the week ended June 29, compared with new supply of 2,973,071 barrels the previous week.

California contributed half of the country's 50,900 barrel gain the past week. Santa Fe Springs increased 9000 barrels daily average; Seal Beach and Huntington Beach each 3000 barrels; and Elwood-Goleta and Long Beach each 2500 barrels.

Earlsboro, Okla., and Pecos county, Texas, fields made the largest gains outside of California, increasing 10,050 barrels and 14,600 barrels respectively. Oklahoma City pool gained 6600 barrels. Maud pool fell off 13,800 barrels, and St. Louis fell off 7250 barrels.

Gray county in the Texas Panhandle declined 7100 and Winkler county 2050 barrels.

Salt Creek field gained 3600 barrels on daily average.

## Oklahoma-Kansas

TWO new wells were completed in the Oklahoma City pool. Two wells capable of more than 2000 barrels initial each from the Wilcox sand were completed about six miles northwest of the Allen pool in southern Seminole county. The Earlsboro pool extension in 18-9-6 furnished one of the best wells of the week in the Magnolia Petroleum Co.'s No. 3 "A" Anderson. The No. 1 Sellers of the Prairie Oil & Gas Co.-T. B. Slick interests opened a new pool in Russell county, Kansas.

At Oklahoma City the Coline Oil Co. drilled in its No. 1 Olds, in the SE NW of 24-11N-2W in an unidentified sand topped at 6300 feet. The well is making more than 4000 barrels from 11 feet in. Mid-Kansas Oil & Gas Co. added the pool's third siliceous lime producer in its No. 2 Fortson NE NW NE of the same sections. The latter is the best well of the pool, having a peak production of 350 barrels an hour.

Magnolia No. "A" Anderson, in the SW NE of 18-9-6 came in for 6000 barrels in the Earlsboro extension. Seven wells in the play are making more than 20,000 barrels total daily production.

In Russell county, Kansas, the Prairie-Slick well in the SW NE of 36-15S-13W, is pumping 300 barrels daily from the Gorham lime pay topped at 3347, and drilled to 3355½. Nearest production is the small Bunker Hill production 12 miles to the north.

## Texas, New Mexico, Louisiana

INCREASED market outlet for Yates field crude, effective July 1, will swell West Texas production figures next week and contribute to a probable new peak in daily average yields for the general domestic industry.

West Texas production, which fluctuated between 355,000 and 365,000 barrels daily in June, will be augmented by an increase in the Yates field allowable outlet from 100,000 barrels to 130,000 barrels daily. The last mentioned figure was recommended by the Pecos County Advisory Committee on prorating practice and approved by the Railroad Commission of Texas.

About 75,000 barrels of crude daily is being produced in non-prorated fields of West Texas. Winkler county continues to be prorated at 150,000 barrels daily maximum and Howard-Glasscock counties at 37,500 barrels.

New Mexico and Louisiana operations throughout the last week were of local significance only.

## California

ALTHOUGH F. C. van Deinse, former umpire, indicated that California operators would restrain their oil output, the figure for the estimated production from various fields in the state shows that not all companies and operators held this viewpoint. One estimate which placed the state's production, for week ending June 22, at 840,000 barrels estimated that it had increased 20,000 barrels for week ending June 29 to give 860,000 barrels.

Several operators, who had intended to continue holding in their production with the understanding that others would do likewise have indicated that they will let up on the valve in order to protect themselves.

Santa Fe Springs had 267 projects heading for zones below the Meyer, including 40 wells which are now standing idle. Of these, 198 are drilling, 112 still above or in the Nordstrom and Buckbee zones and 86 wells that are below 6000 feet. Production for the field is likely to be increased considerably by completions in the lower zones as 32 wells are drilling in the O'Connell, 14 are cemented over it and 5 are preparing to complete in it.

Hope of obtaining wells of considerable size from the Lower Clarke zone at Santa Fe Springs was raised by the completion of Oscar Howard Hathaway No. 6 at 8006 feet for an initial production of over 3000 barrels. Some of the six wells now standing cemented over the Lower Clarke will undoubtedly tell more of what may be expected from below 8000 feet.

Milham Exploration appears to have found the gray sand, overlying the oil sand in the Kettleman Hills area, in its Kennedy well two miles north of its discovery well. If this well obtains commercial production it will mean that eight miles of the structure will have been proven. Standard Oil Co.'s No. 81 and Marland Oil Co.'s 12-8 both drilling ahead for the oil sand are expected to penetrate the oil sands within the next week or so.

# Peculiar Operating Problems Found In Oklahoma City Pool

By John Power
N. P. N. STAFF WRITER

*Sinclair Oil & Gas Co. deepest producing oil well, the No. 1 Stamper. The well, in the NE SW NW of 30-11N-3W, is producing 2400 barrels daily from a total depth 6487 feet. It is cutting four-tenths of one per cent*

OKLAHOMA CITY, June 29

WITH five real undeniable producing wells flowing 16,500 barrels daily as this week closes, the Oklahoma City pool has established its right to be classed among the Mid-Continent's proven oil fields. Having outgrown its swaddling clothes, so to speak, the economic status of the pool, and its relation to the oil industry as a whole must be taken into account in any forecasting of the nation's immediate supply of crude oil.

Here the industry in Oklahoma finds itself confronted with something new. The great depth of the production, the investment necessary to drill a well, the tremendous gas pressures encountered at the top of the zone in which the production is found, and last but by no means least the proximity of the pool to a large city are all factors in the development of the field.

Although it extends production less than half a mile to the west, the most recent completion, Coline Oil Co. No. 1 Olds, in the CSE NW of 24-11N-2W, is perhaps the most important of the wells now producing. The fact that it is producing from sand may rise up to confound those who have been inclined to discount the pool as lime production, likely to decline rapidly and to turn to water on short notice.

Although a core of the sand producing in the Coline well was obtained, showing the zone to be 11 feet thick, the sand has not yet been identified. General opinion is divided, some holding to the opinion that it is an unconformity existing above the Wilcox, while others are of the opinion that it is a break in the upper Wilcox sand. It is probable that it will not be definitely correlated until either the No. 1 well itself is drilled deeper, or some of the offset wells are deepened.

With the exception of the absence of the high pressure gas in the Coline well the formations drilled were pretty much the same as in the other wells in the field. The lime at around 6100 feet proved to contain more sand than usual, but until the sand body found at 6300 feet there was nothing noteworthy about the well.

So far as the identity of the sand, it is bound to remain more or less of a minor consideration so long as it continues to produce at its present rate of 3400 barrels daily. Until the completion of the Coline well, the feeling had been general that the area to the west of the then producing wells was not so good.

In fact, most of the drilling wells farther west had been shut down to await the outcome of some of the drilling wells. Now, with the Coline No. 1 Olds a producer, and with an eye to possible Wilcox sand production beneath the present sand horizon, it is time for the operators on the west part of the field to look at their hole cards.

It is expected that drilling will be resumed on practically all of the wells shut down. In addition, more locations will in all probability be staked in the immediate future.

Another well, awaiting only the successful outcome of a mean fishing job, is almost on the completed list, having given every indication of a producer so far. It is the Mid-Kansas Oil & Gas Co. No. 1 Fortson, in the C SW NE of 24-11N-2W, which is making some oil from the deep pay, with the hole at a total depth of 6367. A wad of wire line in the hole is delaying the completion. The well is an inside location, and should make a well when drilled in.

The proven field now covers a strip about a mile and three quarters long by less than half a mile wide, running diagonally northwest southeast through sections 24-11N-2W, and 19-11N-3W. Before another 30 days have passed, wells now drilling close to the top of the lime should be completed, and a better forecast of the areal extent of the field made possible.

THE extreme southeast well of the producing group is another interesting well. Known as the "gasoline" well, it is producing from 1000 to 1600 barrels of 67 A.P.I. gravity oil per day, with 50 million cubic feet gas capacity. The production is extremely light in color, being almost water white.

The tremendous gas volume and pressure have frosted the separators and lead lines in much the same way that pressure traps in gasoline plants are frosted. The production, together with that of the Sinclair No. 1 Stamper, is run by the Empire pipe line.

In this well the rotary had given over to the cable tools at a point above the gas, encountered at about 6188. Pipe had been set and cemented and the hole filled with heavy mud. Preparing to drill the well deeper, the mud was being bailed down, and had been lowered to 5400 feet. The mud was too thick to bail easily. The tools had been run in to stir it up, when the well blew itself in through the plug. It tossed the tools and wire line part way up the hole, and stuck them there.

Another hold was taken on the line, and the slack taken out, when the gas blew the tools against the closed control head, and blew the wire line out into the lead line. Another joint of pipe was put up so that the tools could be pulled, but again the gas took charge and blew the tools up into this standing joint, and nearly out of the rig.

The control head was taken off, and

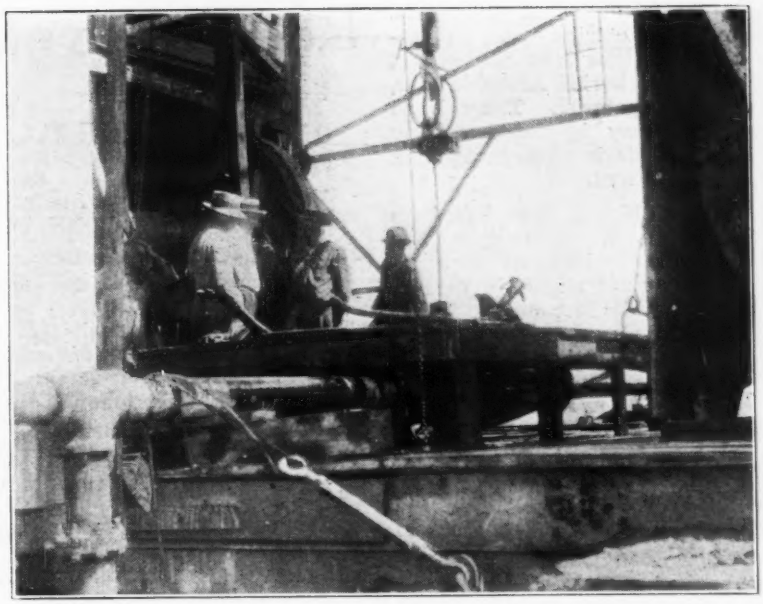
the gas blew the remaining wire line out of the hole. Fittings capable of withstanding 5000 pounds pressure were installed, and the well connected up. As high as 2050 pounds of back pressure has been carried on the well.

Down to the level of the high pressure gas, the drilling of the wells has given remarkably little trouble. Priced at $12 per foot, care has been taken to keep the holes straight, although it has not been necessary to use special connections above the bit, as has been done in the Seminole area.

THE straightness of the holes is attributed in part by the field men to the fact that the formations lie "level," that is, that strata penetrated lie at right angles to the vertical. For this reason it is believed that the bit drills straight through, and has less tendency to glance off at an angle than is the case in localities where a pronounced dip is encountered in the formations drilled. Practically the same equipment is in use as was developed during the drilling up of the Seminole area.

It is when the wells reach about 6100 feet that the fun begins. Although the gas volumes encountered vary from less than 1,000,000 to more than 100,000,000 cubic feet per day, the high pressures seem to prevail throughout.

When the lime shell on top of the gas is drilled through, the gas, under more than 2000 pounds rock pressure hits the tools with the force of a torpedo, flinging them up the hole, and wrapping the wire line around them like thread around a spool. This ball of tools and line becomes fast in the pipe, and a fishing job of the first water results.



*Drilling in the Mid-Kansas Oil & Gas Co. No. 2 Forston, the best well in the pool. It had a peak production of 350 barrels per hour from the siliceous lime*

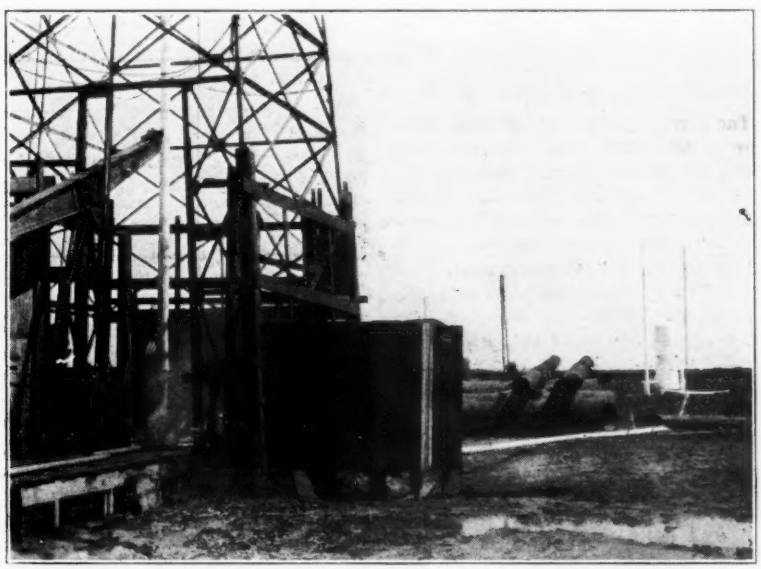
Various schemes have been tried to overcome this unfortunate state of affairs. Some operators are using tools with the body of the bits turned down to allow the gas more clearance past the tools. It is a fairly general practice to keep the hole loaded and drill in wet.

Prairie Oil & Gas Co. has ordered a string of 3½-inch O. D. drill pipe and plans to drill its wells in with the rotary. It is thought the heavy rotary mud may hold the pressure, which in turn will enable the wells to clean themselves when drilled in.

A committee of five field men and engineers, representatives of the various operating companies in the field, is studying the problems of development and production in the pool. It will place its findings, whenever found, at the disposal of all the operators in the field.

M. J. Kirwin, of the Indian Territory Illuminating Oil Co. is chairman. The other members are Glen Harroun, Sinclair Oil & Gas Co.; H. L. Briggs, Coline Oil Co.; J. S. Sidwell, Prairie Oil & Gas Co.; and G. R. Henson, Shell Petroleum Corp.

Geologically, the field still remains something of an enigma. It is generally believed that, with the exception of the Coline well in the CSE NW of 24-11N-2W, and the Sinclair-Amerada No. 1 Kintner in the SNW SE of 30-11N-3W, the production is coming from the siliceous lime, which is about the equivalent of the Turkey Mountain formation of eastern Oklahoma.



*Sinclair-Amerada's No. 1 Kintner, in the NW SE of 30-11N-3W, which is known as the "Gasoline well." It is making better than 1600 barrels daily. Gas expansion has frosted the lead lines and the trap*

WHETHER this condition will prevail in more than the one spot now productive is not known, it being the opinion of some that the siliceous highs may run in waves across the structure, with productive sand areas, such as produced the Coline No. 1 Olds, lying in the hollows.

Others are of the opinion that the siliceous lime will be found productive over a relatively small area, with Wilcox oil found on the flanks. At any rate, the events of the past few days have greatly revived the general interest in the field, which had begun to lag in some quarters due to the low levels at which some of the apparent edge wells were getting some of the so-called marker formations.

The "gasoline" well, for example, was considered doubtful, as it had been running more than 100 feet lower than the discovery well on some of the shallower formations.

The zone in which the interest

centers, starts at about 6100 feet. Known as the detrital zone, it consists of broken lime from the ancient outcrops of the buried Arbuckle hills, and erosional material. There is no telling what may be found at any depth in it, as it is an unconforming stratum throughout.

The Coline No. 1 Olds has been the only well of those drilled to depths of 6300 or below to have encountered the sand streak in the detrital zone. This fact makes it appear that whatever area may be covered by this sand lies on the western flank of the present siliceous lime production, but how continuous this sand body will be can not be foretold.

The presence of such an abundant supply of gas as the field has shown itself capable of producing, coupled with the fact that the field is right at the edge of Oklahoma City, adds to the producing complications. Some of the city land, in fact is under lease to I.T.I.O. Foster-Cromwell-Franklin interests, which means that whenever royalty interests have to be considered in planning the development the city officials sit in. With all due respect to the city's officials, politicians are as a rule even less fitted to decide oil field problems than is the usual royalty owner.

Likewise, the city is wishful to use the gas for domestic and industrial purposes. This is but natural with an abundant supply of gas almost within the city limits. On the other hand the operators are not inclined to drill 6400-foot wells, at a cost of about $125,000 each and complete them as gas. As one company official remarked to this writer, "The mere presence of the gas at this depth represents a diplomatic problem entirely different from the physical problems of handling it. It is something which we will have to work out as we go along." Part of this problem is being attacked by the operating committee mentioned before.

But with all its problems, industrial, economic, and physical, the Oklahoma City pool is indisputably an oil field. It is the deepest field yet encountered in the state, it has many unknown quantities yet to be determined, but its presence is bound to be felt by the entire producing industry of the Mid-Continent.

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**Phillips Holds Sales Conference**

BARTLESVILLE, June 29.—A two day conference of division managers for the retail marketing department of Phillips Petroleum Co. was held here June 26 and 27. Those attending the conference were A. M. Hughes, Amarillo; P. J. Quinlan, Wichita; Lane Dunigan, Kansas City; Fred Cordell, Springfield; T. E. Meech, Des Moines and H. Roy Cunningham, who conferred with R. C. Joplin, H. A. Trower and other marketing department executives.

# Reeser Says Conference Cleared Public Land State Misgivings

Staff Special
NEW YORK, June 28

"THE Colorado Springs conference did a lot of good because it gave the Rocky Mountain states a chance to tell their troubles," E. B. Reeser, Barnsdall Corp., and president of the American Petroleum Institute, said when he was here June 28 to preside over the June meeting of the A.P.I. board of directors. He had had two weeks to appraise the outcome of the conference.

"The conference cleared the atmosphere in regard to the public land phase of the conservation situation," Mr. Reeser continued. "From a compact point of view, I think it brought the federal government to the conclusion that only a few states are concerned in a compact.

"The next meeting about a compact will undoubtedly be limited to the few states that are producing most of the crude."

These few states are California, Oklahoma and Texas. Mr. Reeser said the California gas conservation law was by far the best thing that had come out of the conservation movement which has extended over the last four years.

He said he believed that much good will be accomplished through the continued cooperation of our industry with the Corporation Commission of Oklahoma and the Railroad Commission of Texas.

Mr. Reeser reported to the directors on the proceedings of the Colorado Springs conference but after the meeting W. R. Boyd, Jr., executive vice-president of the institute, said no action was taken and would not be taken until after the states had completed their roster of committees proposed at Colorado Springs.

W. N. Davis, president of the Mid-Continent Oil and Gas Association, who was unable to attend the board's meeting, wrote asking that the board consider the unit plan of pool operation. There was some discussion but no action taken, Mr. Reeser said. The plan is operating successfully in some Mid-Continent pools, he added.

The directors expected that the Federal Trade Commission would have announced the code of marketing practices for the oil industry by the time the board convened but a call to Washington brought a reply that the code would not be announced yet. Until it is known just what the commission has done with the results of the trade practice conference in St. Louis Feb. 11, the institute will take no action, it was announced.

Should the commission approve the code as drafted at St. Louis, it is expected the institute directors will act at once to induce all marketing companies to adhere to its provisions. But if the code is altered in essential parts further consideration may be necessary before the institute will recommend it.

The institute will have no part in getting signatories to the code other than supplying the names of marketing companies. It is the practice for the trade commission to send a copy of the code to companies that will be aected by the code together with a form to be signed if the company agrees to the code's provisions.

Mr. Boyd told the directors that more than a million and a half of gasoline tax folders the institute is publishing have already been sold. He said automobile associations have approved the institute's action toward forestalling further radical increases in gasoline taxes and that some cooperation from the automobile associations might be expected in the future.

The following directors were present: Mr. Reeser; John L. Gray, Shaffer Oil & Refining Co.; W. G. Skelly, Skelly Oil Co.; H. L. Pratt, Standard Oil Co. of New York; L. J. Drake, Union Tank Car Co.; S. A. Guiberson, Jr., Guiberson Investment Co.; L. L. Marcell, White Eagle Oil & Refining Co.; W. M. Irish, Atlantic Refining Co.; H. B. Earhart, White Star Refining Co.; W. S. Fritzpatrick, Prairie Oil & Gas Co.; C. H. Kountz, Prairie Pipe Line Co.; D. E. Buchanan, Chestnut & Smith Corp.; Frank Phillips, Phillips Petroleum Co.; J. Howard Pew, Sun Oil Co.; Edward Prizer, Vacuum Oil Co., and B. H. Stephens, Magnolia Petroleum Co.

Visitors at the meeting were: E. J. Bullock, Standard Oil Co. of Indiana; A. E. Watts, Sinclair Consolidated Oil Corp.; E. D. Sadler, Creole Petroleum Co.; J. M. Sands, Phillips Petroleum Co., and Ralph H. Kinsloe, Magnolia Petroleum Co.

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WASHINGTON, July 1.—The Federal Trade Commission June 28 considered the report on the code of marketing practices for the petroleum industry but did not settle several disputed questions. Until these questions, the nature of which was not divulged, are settled nothing will be given out to the industry.

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NEW YORK, June 29.—Sinclair Refining Co. has bought the Zip Oil Co. of Philadelphia.

# Oklahoma Opposes Oil Compact Vesting Coercive Power in Federal Agency

TULSA, July 1

A RECOMMENDATION that any future conference that may be held to formulate an interstate oil agreement be limited to three, and possibly six, states, is contained in the report of a sub-committee of the Oklahoma official delegation that attended the Colorado Springs conference.

The limitation was urged on the ground that the differences in conditions in the Rocky Mountain states and in other states lacking the public land issue of the Rocky Mountain states are so great as to preclude meeting on a common ground.

The report also pointed out that the four governors who attended the conference placed undue stress in their remarks on the public interest in conservation. It was urged that the oil industry in Oklahoma and elsewhere in the United States is essentially a private enterprise.

The Oklahoma sub-committee expressed the opinion that the oil industry of Oklahoma cannot be brought into unity of opinion until the oil tariff question is settled by Congress one way or another.

That part of the Oklahoma committee report, omitting the formal history of the purpose of the conference, which contains the opinion as to achievement and the recommendations, follows:

"A PRACTICAL PROGRAM FOR THE CONSERVATION OF AMERICA'S PETROLEUM RESOURCES" was not formulated, was not, under all the circumstances possible. Whether or not any feasible plan will be brought forward depends upon future events. This does not mean that no benefit was realized from the meeting.

One important result was that the attention of public men and officials, as well as those actually engaged in the industry, was directed as never before to this most vexatious of all petroleum questions — CONSERVATION. A question that has troubled the industry these two years and more. A question that has had the attention of our own state and federal governments. The agitation of this question, to a very real extent, has threatened the stability of the business itself.

Another fact of importance was the candid nature of all the discussions. Every shade of opinion found expression. The conflict of interests. The political, economic and geographic differences of the various oil producing states. The importance on domestic development, upon the very conduct of the petroleum business itself, of foreign importations. The arguments for a tariff. The source of opposition to all duty on crude or refined importations. The conflict of state and national authority. All these points and opinions were clearly and forcibly pointed out in a forum where each man was free to speak his mind. This last must be said if only to give credit where it is due—to the presiding officer, Mr. Requa, whose very difficult job it was to conduct the discussions.

It was made plain that development of petroleum and resources in the Rocky Mountain states, for instance, is not the same as in Oklahoma. That there is between these two territories an essential legal and economic difference. In these public domain states petroleum resources are in a very real sense already nationalized. There development proceeds or stops by act of Congress or departmental regulation. Oklahoma, on the other hand, except for a negligible part of its oil lands, develops and operates its resources free of any regulatory statute, either state or national. Here private enterprise is free and may develop its resources with all the advantages or disadvantages of that system, except that waste is prohibited by state statute.

THE report to Governor W. J. Holloway of the Oklahoma delegation to the Colorado Springs conservation conference, of which the main portion is published herewith, was written by a sub-committee of three oil men from the official delegation. Pat Malloy, Tulsa, was chairman. Other members were James A. Veasey, Tulsa, and E. W. Marland, Ponca City. J. Berry King, assistant state attorney general, was legal adviser of the state to the committee.

The full committee appointed by you entered upon its duties at the conference fully understanding that they were commissioned as observers; that they did not have the power to commit you, the state of Oklahoma, or the petroleum industry therein, to any specific measure or measures that might be proposed at the conference. Your full committee further realized that its individual members represented at least three different interests in the industry in Oklahoma; the so-called independent operators, the royalty owners, and the so-called major companies, whose interests or opinions in relation to the problems of conservation were different and might in fact conflict.

In these circumstances, even if the full committee had been vested with broader powers, an agreement upon the part of the full committee upon the exercise of such powers would have been difficult if not impossible of accomplishment. Appreciating these things, your full committee, at its first meeting, unanimously agreed upon two things. First, that they were sent to the conference as observers only, with the duty of reporting back to you the deliberations and the tendencies of the conference for your further consideration. Second, that you had so constituted the full committee as to represent every interest in the petroleum business in this state, and that this wise precaution on your part should be furthered by the Oklahoma delegation.

ACCORDINGLY, two decisions were reached by the full delegation at this first meeting: 1st, that the extent to which the Oklahoma delegation could give sanction to any proposal made before the general conference was that if the other states represented at the conference were willing to support a resolution for a further study of the matters discussed at the conference, the Oklahoma delegation might properly join in that assurance; 2d, that the sub-committee, appointed by the full committee to participate in the more intensive deliberations of the conference should be representative of the three interests present in the full committee, namely, the independent producers, the royalty owners, and the major companies; and the sub-committee making this report was constituted along those lines.

A. The extent to which the numerous state delegations did agree by resolution was that the delegates were either not authorized or were not fully informed regarding the pro-

posals discussed, so that the only action which the conference properly might take would be a resolution for a further study of the various problems presented. This committal of further study in the light of the discussions had was not limited to the question of an interstate compact but to all major questions involving the conservation of the country's petroleum reserve. Your sub-committee, acting for the full committee, and under the assumption that it had the power under your commission to go that far, supported this resolution.

B. The only other specific resolution adopted by the general conference was to this effect: "We recognize that the oil situation has international as well as national aspects, and that the importation of oil is a factor in the situation of this country which must be considered in any policy dealing with the entire subject." Your sub-committee, by virtue of the limitations on its authority did not vote for or against this resolution. On the other hand, we wish to report to you that, if we had felt that we had the power to do so, we would have voted in favor of this resolution, and this also was the unanimous position of the full delegation.

All of us believe that domestic production in the United States—certainly the importation of crude oil into the United States—and possibly the importation of refined products thereto present a single and common problem; that no adequate conservation policy in the United States can be worked out, or, in fairness to the American producer, should be worked out unless the measure adopted takes into full account the importation of crude oil into the United States, possibly the importation of refined products thereto, so that there shall be equality of treatment in respect of the American producer and the importer of crude and refined products into the United States. Manifestly a conservation law that would enforce the shutting in of development under penalty of statute or regulation must have its complement in some enforcible statute for the control and development of foreign fields, the bulk of whose present production (crude and refined) reaches the American market free of duty.

WHILE the foregoing statement in the opinion of your sub-committee covers the formal action of the conference, other matters were deliberated there and other aspects developed which merit attention in this report.

A. If a further conference in relation to the interstate compacts, or even in relation to the general question of oil conservation, shall be called by the President of the United States, we urge that the conference be limited to the states of Oklahoma, Texas and California, and possibly all or some of the following states—Kansas, Louisiana or Arkansas. The problems will be difficult enough even if the conference is so limited. The differences between conditions in the Rocky Mountain states and in the other states here enumerated are so pronounced, as we have hereinbefore described, that the inclusion of the Rocky Mountain states in another conference would add little in the direction of accomplishing constructive results, and on the other hand, might defeat that accomplishment.

THE California delegation to the Colorado Springs conference submitted their report to Governor Young and his council June 26. Unlike the Oklahoma report, it contained no comment on the discussion at Colorado Springs or the future procedure approved there. It was simply a brief resume of the proceedings during the conference.

Members of the California delegation were F. C. Stevenot, director, Bureau of Natural Resources; U. S. Webb, attorney general; W. J. Carr, state railroad commissioner.

B. Four governors attended the conference in person, namely, the governors of Kansas, Wyoming, Montana and Colorado. These gentlemen, in the opinion of your sub-committee, emphasized too strongly the public interest in the problem of oil conservation. Other speakers stressed this point of view also. If the sole purpose of these remarks was to point out that we are dealing with an irreplaceable natural resource, which is indispensible to the general well-being of the American people and to the national security, we may well accept the same as a correct generalization, subject, however, in the making of national petroleum policy to very definite limitations.

The petroleum industry in Oklahoma, and elsewhere in the United States, is strictly a private enterprise. Those who own and operate such petroleum resources are not in any legal sense trustees for the public. Petroleum lands, outside of the Rocky Mountain states, and to some extent in several of the other states, but particularly so in Oklahoma, are privately owned. The only statutory limitation which may be placed upon the use of this property are laws by the state to prevent waste.

The federal government has no power over the subject whatever. If, therefore, either the discussions of these distinguished men, or the tendency thereof, was to intimate the classification of any branch of the American petroleum industry, producing, refining, or marketing, as a public utility, it is not only the united opinion of this committee but that of the industry in this state and everywhere else in the United States that any such possibility should at all times most vigorously be contested and opposed.

C. While there was discussion upon the possible form of an interstate compact, this subject was not developed in any appreciable degree, because of the strongly avowed position of the delegation from Oklahoma, Texas and California, that the extent to which they might go in this respect was to enter upon a further study of not only this question but of the conservation problem generally. So far as these three states were concerned, we feel, however, that we may report that there was unanimous objection to the setting up of an interstate conservation agency through an interstate compact, and the vesting of coercive power to regulate the business of producing oil and gas in the compact states in a body of that character.

IT IS not conceivable that an American state would surrender its sovereignty and its police power by any such device. The insurmountable obstacles to such a program are threefold: First, politically. The compact would never receive the sanction of the legislatures of the compact states. Secondly, the oil industry in Oklahoma, at least, and we believe it to be equally true of California and Texas, would never consent to a super-commission of this nature. Finally, there are the impressive objections to this plan upon constitutional grounds. Therefore, we urge upon you the strongest possible resistance to an interstate compact of the coercive character just outlined.

D. No question before the conference was more strongly urged than the necessity of a tariff on imports of crude oil and refined products into the United States. The proponents of this measure gave it as their opinion that an adequate tariff law, elastic in operation as to rates in view of existing conditions, the rate to be determined by the President of the United States, within a minimum and maximum established by the act, would in itself, meet the whole problem of overproduction and conservation.

Your committee does not feel called upon to express an opinion upon the merits of the tariff question in relation to oil production. We do believe, however, that a vast majority of the independent operators and royalty owners in this state favor an oil tariff. Among the larger companies opinion is divided. Some of them, by reason of their South American production, doubtless oppose the tariff. Others of the major companies which

do not own South American production do not regard the tariff proposal as a sound measure of relief. On this point, however, your committee is convinced of two things.

First, that the import question is an integral part of our two domestic problems of overproduction and of conservation. We further believe that the American petroleum industry can never be brought into a general agreement regarding methods to avert overproduction and to promote conservation until the methods proposed make full allowance for the effect which imports have upon our strictly domestic situation, both in regard to production and conservation.

Second, that by reason of an honest belief on the part of the vast majority of independent producers in this state and elsewhere, the tariff question must be settled one way or another before other substitute measures for the settlement of the international situation will be considered by the elements which are now urging a tariff. The matter, as we understand it, is now before Congress. It will certainly have very strong support before that body. It may have some opposition from certain elements in the American petroleum industry. But, after all, it is our opinion that the matter of tariff, or no tariff, will be determined by the sentiment in Congress itself.

If a tariff law is written in this connection, the industry will adjust itself thereto and the benefit therefrom in respect of overproduction and conservation will then be demonstrated. If this remedy shall prove inadequate, or if a tariff law fails, then still is it the opinion of your committee that further conservation study and action must treat the import question on a parity with the domestic situation before the problems of the American petroleum industry can be met.

E. In conclusion, we assume that our report would not be complete unless we provide you with a specific recommendation, based upon the conference at Colorado Springs, and our own appraisal of public sentiment in the oil industry in Oklahoma since that event. Probably no one knows whether a further conference will be called to resume consideration of the matters debated at Colorado Springs. From the press we gain the idea that another conference may be called. In the meanwhile what is to be done in Oklahoma in this connection?

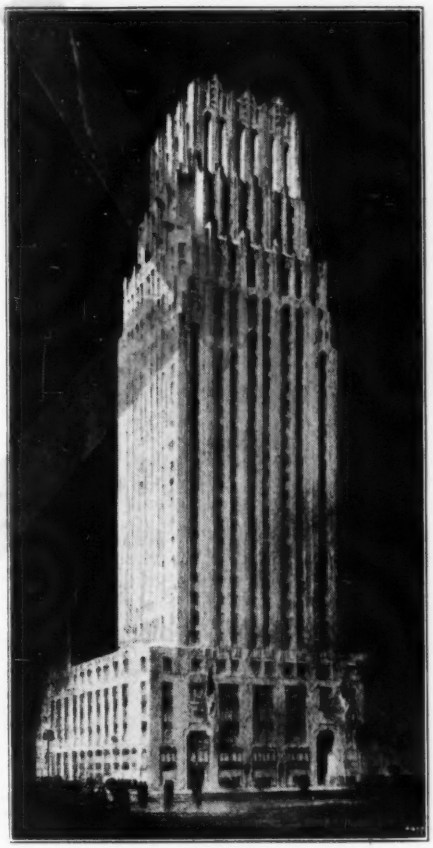
We take it that you would not be disposed to urge any particular policy of oil conservation unless you had the support of a substantial majority of the industry in this state, a majority consisting of the three interests involved. We further believe that unity of opinion cannot be brought about in the industry in this state until the tariff question is settled by Congress one way or the other. If an oil tariff shall be enacted, it may be found that overproduction still menaces the industry, and in that situation the operators of this state may be able to agree upon a program that should be presented to the conference.

On the other hand, if the tariff enactment should fail, and particularly if the industry is still confronted by overproduction, there will be greater urgency for agreement on the part of the industry in this state, and this we think should be at that time attempted.

In the meanwhile it is our view that we must abide developments. The industry in this country should not be subjected longer than it is absolutely necessary to this continued and constant agitation for legislation, changing and affecting the very development and operation of the business. To subject this basic industry to a long and continued uncertainty of its position under the law will only tend to render the industry and its business unstable and unsettled, to the detriment of the industry and the country as well.

The delegation which you have heretofore appointed should, in our opinion, stand as a permanent committee for your permanent advice and counsel. This because it has the benefit of the experience and knowledge that came out of the initial conference.

# N.P.N. Occupies Gulf Building Offices at Houston



*Newly completed Houston office building built for subsidiaries of the Gulf Oil Corp.*

Staff Special

HOUSTON, July 2

THE new 34-story Gulf building to which NATIONAL PETROLEUM NEWS moved its Houston office July 1, is described in construction circles as the largest and tallest south of Chicago.

Measuring 440 feet from the sidewalk to the top of the observation tower, the new structure represents an outstanding architectural achievement. It has a floor area of 422,809 square feet and a day-time population estimated at 2500 persons when fully occupied.

Twelve floors of the structure, from the seventh to nineteenth, inclusive, are occupied by the Gulf Production Co., and associated subsidiaries of the Gulf Oil Corp. of Pennsylvania. The Gulf Companies completed their work of moving so as to occupy their new quarters June 15.

NATIONAL PETROLEUM NEWS, which occupies two units, at 2020-2021 Gulf building, was among the first of the other occupants to move into the new quarters.

Occupants are made up largely of oil and equipment companies, together with representative law firms and others. Those occupying units below the twenty-first floor have, in many cases, already moved in. Others will be delayed until about Aug. 1, awaiting interior finishing work.

Virtually every necessity of business life will be found housed in the new structure. Included will be banking facilities, brokerage establishments and the various types of business services required for rapid conduct of industry.

A description furnished by the building management estimates that 30,000 persons will travel in and out of the building every business day. There are 2137 windows in the building and more than 4000 lighting fixtures of various types installed.

There are 25 miles of steam and water pipes and hundreds of plumbing fixtures for the sixty, or more, wash rooms.

Due to the architectural design followed every office is an outside office.

# The Mid-Continent Skyline

By Lawrence E. Smith

**ADVOCATES of a tariff on oil** are arranging a horse trade with the oil men—and members of congress—of states that felt the effect of the Hoover order restricting development on public lands. In the proposed conference in Washington early in July it is planned to include the public land question along with the tariff as the program for the meeting.

Such a trade might be effective. It would be a political move purely, as the Mid-Continent has no public land question and the Rocky Mountain states are only remotely interested in a tariff. Neither can be said to feel deeply on the other's problems but in this politically managed country of ours most results are reached through horse trading.

Strangely enough, there doesn't seem to be much active opposition to an oil tariff. Without question, plenty of people are opposed to it, but no organization has been formed to combat it nor have the opponents busied themselves in answer to the advocates.

An executive of one of the major units remarked to the writer recently that he didn't believe as many as three large companies had really made up their minds on the subject. There are plenty of those who say the campaign being made by the Independent producers and royalty owners is futile, that the president wouldn't approve, that Congress will never get around to consider it, etc., etc.

It is best not to pre-judge the outcome. Numerically, the people who favor the tariff are strong. They have the coal people with them and that means something. It looks as though the battle will be a vigorous one.

* * *

**State pride item: Most of the** "imported" whisky consumed in Oklahoma City is made right at home and whisky made in Kansas City is vended along the Canadian border, according to Roy St. Lewis, United States attorney at Oklahoma City.

* * *

**Tulsa is having its share of labor** troubles this summer. Recently the drivers of 'busses laid off for two days. Worst of all, though, was the strike of caddies at the Oakhurst Country Club. As yet the governor has not intervened in the latter affair.

* * *

**Waite Phillips, chairman of the** board of the Independent Oil & Gas Co., with his family is spending a short holiday in Europe.

* * *

**Station KVOO, of Tulsa, owned by** W. G. Skelly, lost its fight before the federal radio commission. It sought the wave length now occupied by W. K. Henderson, at Shreveport. The commission now says that the Tulsa station will be permitted, at least during the summer months, to use its wave length full time, although an Alabama station has a half interest in it.

* * *

**The Independent Engineering Co.** announces the removal of its offices from Borger to Pampa, Tex. Roy Purdue is the chief of this company and B. F. Purdue is secretary. The firm specializes on gas tests, meter checks, design and construction of plants.

* * *

**A. M. Gee, the well known legal** lawyer of the Mid-Kansas Oil & Gas Co., Tulsa, returns from Pecos county, Tex., with a tale of having played on the field golf course there. Oil companies attacked the greasewood with graders, clearing narrow fairways. The greens are made of cottonseed hulls and are dry, so that a ball that hits always sticks. Oil field employes apply themselves faithfully to the game.

*R. S. Shannon*

* * *

**J. M. Post, Mid-Continent district** manager for the Oil Well Supply Co., has been transferred from Tulsa to Oil City, Pa., where he will have charge of all stores east of the Mississippi.

* * *

**R. S. Shannon, new chairman of** the Rocky Mountain section, A.P.I. division of development and production engineering, has been with the Continental Oil Co. for about 15 years and at the time of his election was assistant general manager of the producing department, prior to merger of that company with the Marland.

He was one time vice-president and general manager of the Inland Oil & Refining Co., operating in Rocky Mountain territory. This company later became the Continental Oil Producing Co. He has specialized in Rocky Mountain field conditions and is considered an authority on problems and possibilities of the states in this group.

A brother, P. F. Shannon, formerly headed the petroleum engineering department of the Colorado School of Mines, recently resigning to go to Colombia with the Tropical Oil Co.

* * *

## Ten Years Ago

**(From National Petroleum News, July 2, 1919)**

American Petroleum Institute to conduct balloting of oil companies on question of installing curb pumps free to dealers.

Riverside Western Oil Co. and Riverside Eastern merge with Transcontinental Oil Co., newly formed.

A. J. Diescher, former general manager of Empire companies, forms Emerald Oil Co.

* * *

CASPER, Wyoming

**A drive from Casper to Salt Lake** City, made recently by this writer, was one of the pleasurable events of the year. **An excellent highway has**

been built between Casper and Rawlins, where it connects with the Lincoln Highway on to Salt Lake. For the most part, the highway is in excellent shape and one can easily average 45 miles per hour.

The chief event of interest in southwestern Wyoming at this time is the construction of the gas pipe line to Salt Lake City and Ogden. It is a joint venture of the Ohio Oil Co. and the Crawford interests. In Salt Lake and along the line we renewed acquaintance with a number of oil men who now are engaged in putting through the gas project.

John McFadyen, vice-president and director of the Ohio Oil Co., is president of the Mountain Fuel Supply Co., which will supply the gas, and C. R. Hetzler, also an Ohio man, is vice-president. We found them at Rock Springs, where Mountain Fuel maintains chief operating offices.

W. A. Miller, president of the Illinois Pipe Line Co., who is in addition the president of the Uinta Pipe Line Co., the gas trunk line system, also was stopping over in Rock Springs while on a trip out from Findlay, Ohio, to note the progress of the work. Frank McCarthy, formerly of the Producers & Refiners Corp., is a vice-president of the Uinta company and in direct charge of the construction.

In Salt Lake City, L. Fitzpatrick is in charge of the distributing system in that city and Ogden. He was a production man in Findlay, being assistant general superintendent of the Ohio Oil Co.'s oil operations in Ohio, Indiana, Kentucky and Michigan. Mrs. Fitzpatrick and their daughter recently moved to Salt Lake and the Fitzpatrick residence has been established in the Mormon City.

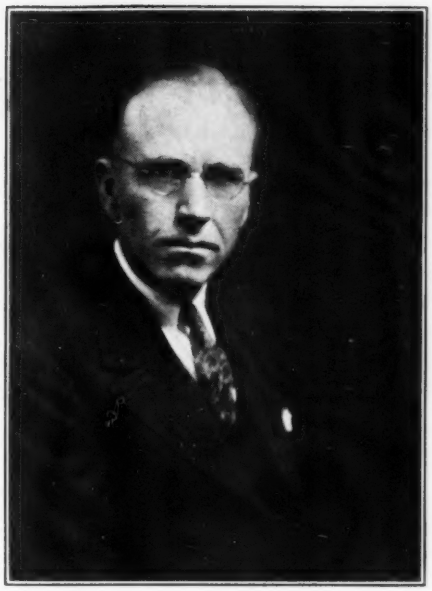
* * *

**E. B. (Hardrock) Coolidge, of Great** Falls, Mont., says that the annual convention of the Montana division, Rocky Mountain Oil & Gas Association, promises to be one of the best. It will be held Sept. 18, 19 and 20, in Calgary, Alberta. There is a community of interest between Montana and Alberta operators, notwithstanding the international boundary between them, hence the visit this year to the Canadians.

Mr. Coolidge is one of the pioneer producers in Montana, having had a hand in the Cat Creek development. He organized the Homestake Exploration Co., principal holdings in the Sunburst field, and sold control to the Texas-Pacific Coal & Oil Co. He is a distant relative of Calvin Coolidge, but being a self-starter himself, has never traded on that relationship.

* * *

**George H. Jaques, whose photo**graph appears herewith, was recently elected a director of the Midwest Refining Co. He has been with the company since 1917, coming into the



*George H. Jaques*

organization to build and operate machine shops in the Big Muddy field. Subsequently, he built and had charge of the present shops of the Midwest in the Salt Creek field.

In 1925 he was given the superintendency of the company's shops and equipment and in 1927 he came into the Casper offices as assistant general superintendent of the producing department. When the superintendent, A. W. Peake, resigned to become president of the Dixie Oil Co., Mr. Jaques succeeded to that position which he now holds.

Mr. Jaques was born in Illinois but moved to Nebraska at an early age. He is a graduate of the Fairbury high school. He began his industrial career in mining and railroad construction in the west, in Mexico and on the Pacific Coast. In California he got his first oil experience, serving with the Ventura Oil Co. and with the Union Oil Co. of California.

Mr. Jaques is well known through his work on standardization committees of the American Petroleum Institute and because of his several inventions of drilling equipment, now in general use.

* * *

**J. W. Steele, supervisor for the** United States Geological Survey of operations on public lands, Casper district, has returned from Colombia where he went several months ago to the invitation of the Colombian government to advise on the oil policy of that country. Mr. Steele, who was a bit under the weather when he left, comes back with health fully restored. The other advisor from this country invited by Colombia was H. Foster Bain, secretary of the American Institute of Mining & Metallurgical Engineers.

* * *

**The golf game played by your cor**respondent with "Pete" Gillespie, of the National Supply Co., at the Casper Country Club was one of the outstanding sporting events of the year. The contest was about even as to form displayed. Mr. Gillespie showed the superior skill at getting out of traps but his opponent was slightly the better in tall grass.

* * *

**Balloting by mail, members of the** Rocky Mountain section, American Petroleum Institute division of development and production engineering have elected officers for this year. R. S. Shannon, assistant general manager of production of the Continental Oil Co., Denver, was elected chairman; R. O. Armstrong, deputy supervisor, U. S. Geological Survey, Casper, vice-chairman and K. B. Nowels, of the Laramie, Wyo., station of the Bureau of Mines, secretary.

Retiring officers are Fred E. Wood, Midwest Refining Co., chairman; Sam Grinsfelder, Union Oil Co. of California, vice-chairman. Mr. Nowels was secretary the past year and was re-elected.

* * *

**Sam Grinsfelder, of the Union Oil** Co. of California, is now stationed at Abilene, Tex. He handled production engineering work in the Fort Collins, Colo., field for the company until the properties were purchased by the Continental Oil Co.

# Book Reviews

In a preface to his new book, "Paleontology" (McGraw-Hill Book Co., Inc., $3.50), Edward Wilbur Berry states his purpose as being to "interest rather than to repel the beginner—a pedagogical principle all too frequently ignored."

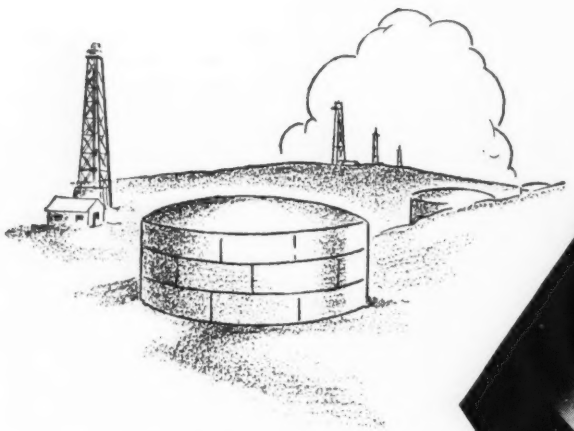
Mr. Berry, who is professor of Paleontology at Johns Hopkins University, and a member of the National Academy of Sciences, lays chief emphasis on two aspects of his subject: first, resemblances rather than differences, which is only another way of saying that the treatment is, as far as possible, evolutionary; and, second, adaptations of organisms to environment.

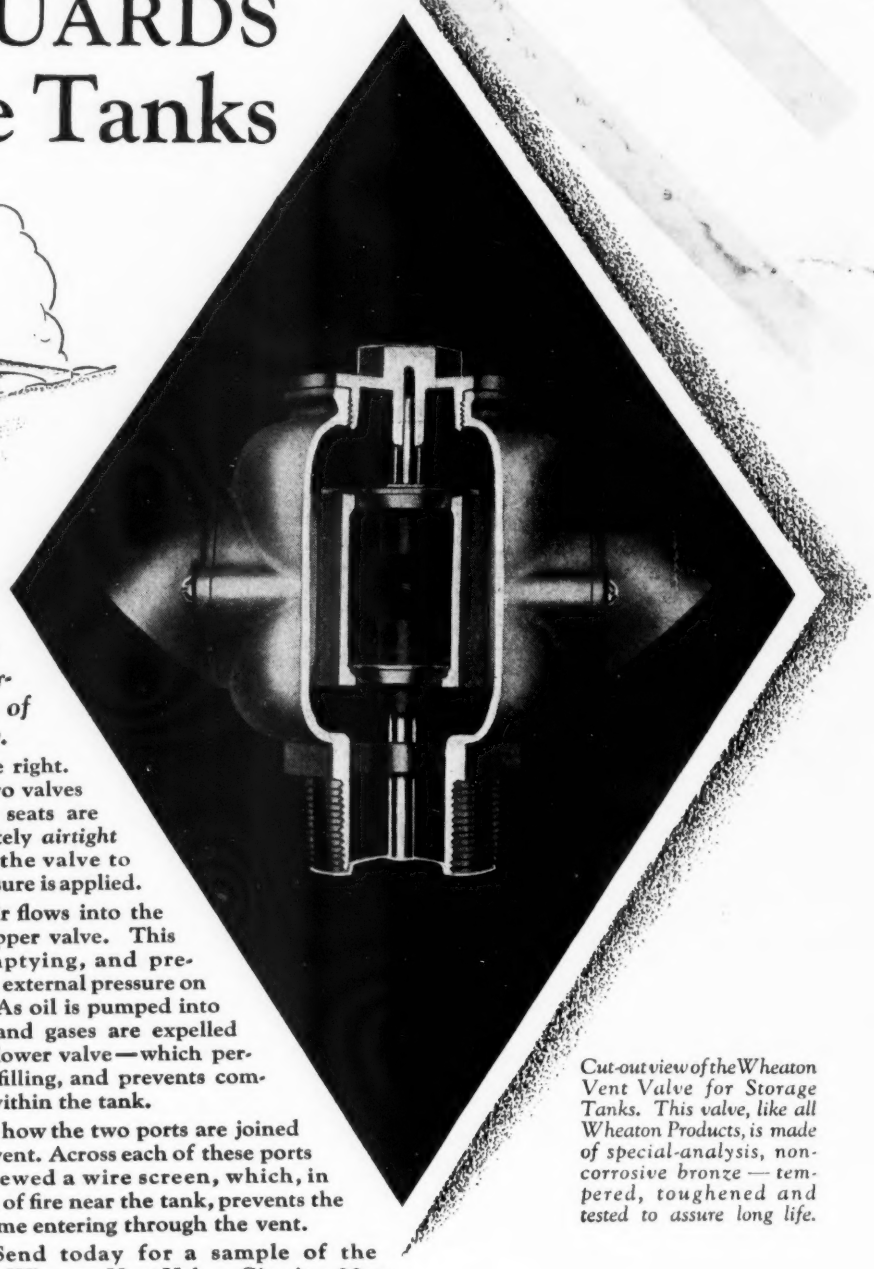
The subject of paleontology is in itself specialized and unsuited to the lay mind. Dealing as it does with traces of long dead organisms dug out of rocks and chiefly useful as indicators of geological horizons the book naturally teems with terms and descriptions understood only by those trained for its study.

Mr. Berry has approached his subject from the practical rather than the philosophical viewpoint, however, simplifying his text insofar as the nature of the subject permits with numerous illustrations.

—P. W.

# Read how *perfectly* this vent valve SAFEGUARDS Storage Tanks





*Cut-out view of the Wheaton Vent Valve for Storage Tanks. This valve, like all Wheaton Products, is made of special-analysis, non-corrosive bronze — tempered, toughened and tested to assure long life.*

**The Wheaton Vent Valve for Storage Tanks provides the *perfect admission and expulsion of air*—essential to real *safety*.**

Look at the cut-out view at the right. Observe how *precisely* the two valves fit into their seats. These seats are *ground*—they are absolutely *airtight* when shut and enable the valve to open the *instant* air-pressure is applied.

As oil is drawn off, air flows into the tank through the upper valve. This permits quick emptying, and prevents vacuum and external pressure on the tank walls. As oil is pumped into the tank, air and gases are expelled through the lower valve—which permits quick filling, and prevents compression within the tank.

Observe how the two ports are joined to the vent. Across each of these ports is screwed a wire screen, which, in case of fire near the tank, prevents the flame entering through the vent.

Send today for a sample of the Wheaton Vent Valve. Give it a 30 or 60 days' test. If you are not entirely satisfied, return it for credit or refund.

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# Wheaton

FAUCETS · VALVES · JOINTS · COUPLINGS · FILLERS · NOZZLES · FITTINGS

# Water in Top of Yates Structure Minimizes Economic Threat

By Paul Wagner
N. P. N. STAFF WRITER

HOUSTON, July 1

TWO oil wells showing water encroachment high on the Yates field structure have emphasized the Pecos county district's lack of immunity from damaging intrusions under open flow exploitation.

Although testing only 1 per cent and 5 per cent water, respectively, the presence of any encroachment in the No. 16 Yates well of the McMan-Marland partnership and the No. 18 I. G. Yates of the California Co. cannot be discounted.

The McMan-Marland well is in Sec. 34½, best described as 210 feet south and 300 feet east of the southwest corner of Sec. 104, block 194, in the Yates field. California Co.'s affected well is a half mile south and a little west of the McMan-Marland No. 16, more specifically located as 850 feet south and 955 feet east of the northwest corner of Sec. 34.

Water made its appearance in the two wells when they were given 1-hour open flow tests for prorating purposes early in the week. Their testing was a part of the program under which all Yates field wells were opened for an hour in establishing new potentials in the prorating yardstick effective July 1.

A total of 58 Yates field wells now show water percentages as compared with 37 last January 1. Then, the encroachment had been confined to wells low on the structural edges of the field. Wells now producing total 313 as compared with 284 at the beginning of the year.

It has been recent Yates field practice to make 1-hour tests for prorating purposes only on new completions. Old wells have been taken into prorating calculations at test ratings made earlier in the history of the field.

Two conditions brought this about. One was that monthly or semi-monthly opening of all wells might tend to induce "coning" from the water table underlying the oil. The other was that Yates operators have built no storage in the field, except lease tankage, and frequent tests would have necessitated construction they have consistently sought to avoid.

The fact also that the field always has been exploited at less than 5 per cent of its rated daily potential seemed to the operators to make more frequent testing unnecessary.

Value of precautionary measures, such as mentioned, appeared to be justified in results obtained from testing all wells immediately prior to the July 1 increase in Yates field outlet to 130,000 barrels daily.

Total potential established by opening all wells was only approximately 225,000 barrels less than shown by taking old completions at earlier ratings and adding to them the hourly test gauges of newer completions.

The maximum rated potential under the old plan was reached in the June 1 figures of 4,827,516 barrels. By opening all wells for similar 1-hour tests a July 1 rating of 4,590,686 barrels was obtained from 313 wells on 177.5 producing units of 100 acres each.

Six months ago, January 1, 1929 figures gave total potential of 4,348,-191 barrels credited to 284 wells. A year ago, July 1, 1928, 206 wells were credited with total potential of 2,-575,047 barrels.

The fictitious character of this type of potential figures has always been recognized by Yates field operators, who have used them only for prorating purposes. Operators have consistently pointed out that such figures served their purpose in an equitable yardstick used to determine percentages of limited market outlet from the field but that they cannot be properly construed as the quantity of daily production exploitable in the field.

A prorating system in effect the last 12 months has called for the averaging of the potential of 100-acre producing units in order that "lean" wells and those tapping "rich spots" should be equalized, thereby setting up a refinement for a maximum of equality in withdrawals.

Under that system average potentials apply. A single well on a 100-acre producing unit goes into the yardstick at its total potential gained by multiplying the 1-hour test showing by 24 to obtain a daily figure. Total potentials of additional wells on a 100-acre unit are added together and the sum divided by the number of completions to gain an average, which then become the potential rating of the unit.

The average potential system, which came to be widely recognized as a truer measure of producing possibilities than the total potential scale, gave the Yates field the following potentials as of the dates specified: July 1, 1929, 2,191,184 barrels; Jan. 1, 1929, 2,203,904 barrels; July 1, 1928, 991,824 barrels.

IN ORDER to further discount the fictitious character of Yates field potentials in their interpretation outside the prorating yardstick, the Pecos County advisory committee of producers is at present using 12-hour figures instead of 24-hour figures for field ratings.

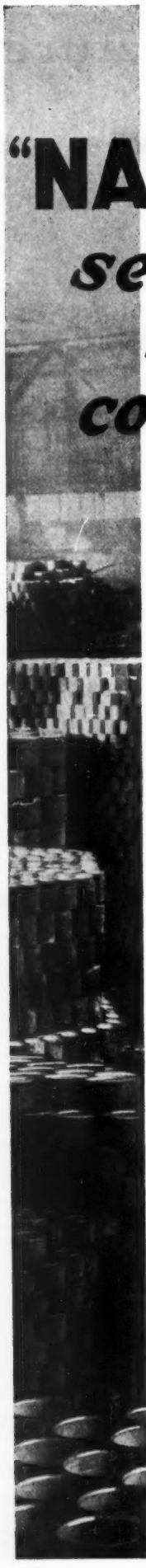
That means, when reduced to mathematical formula, that the July 1, 1929 total potential of 4,590,686 barrels or the average potential of 2,-191,184 barrels, reached on the 24-hour basis, becomes 1,095,592 barrels treated on the 12-hour basis.

The Yates field has yielded gas only in the apex of the structure, hence the natural water drive back of the

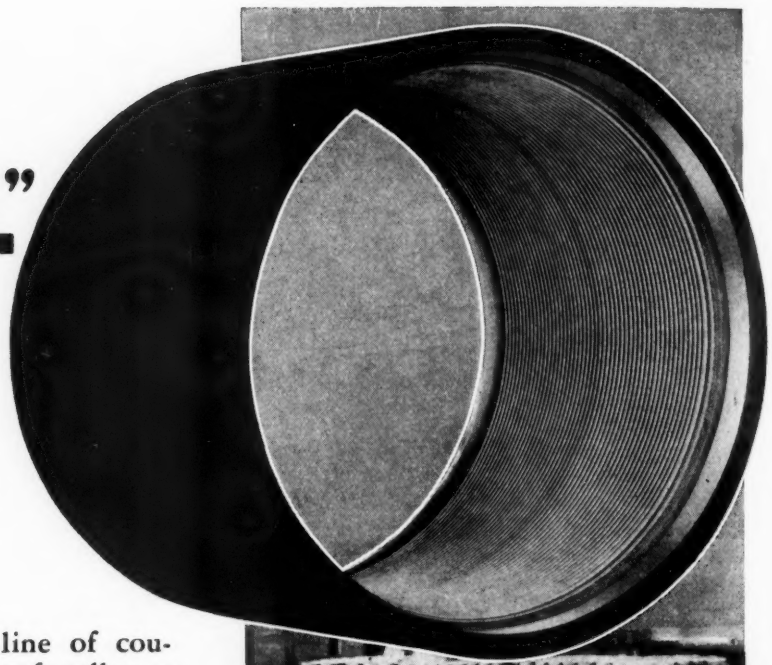
(*Continued on Page* 53)

## Yates Field Prorating Allowances by Companies

| Company | Allowable Production (Barrels) | Pipeline Disposition Humble | Shell | Illinois | Gulf |
|---|---|---|---|---|---|
| California Co. | 17,036 | 10,000 | 7,036 | ..... | ..... |
| Mid-Kansas O&G | 61,366 | 10,000 | 4,333 | 47,033 | ..... |
| Crosby et al | 300 | 300 | ..... | ..... | ..... |
| Dixie Oil Co. | 30 | 30 | ..... | ..... | ..... |
| Gulf Production Co. | 17,888 | ..... | ..... | ..... | 17,888 |
| Humble O&R Co. | 3,301 | 3,301 | ..... | ..... | ..... |
| Kirby Petroleum Co. | 80 | 80 | ..... | ..... | ..... |
| Kirby-Edson | 250 | 250 | ..... | ..... | ..... |
| McMan O&G Co. | 5,002 | 1,609 | 3,393 | ..... | ..... |
| McMan & Marland | 6,669 | 6,669 | ..... | ..... | ..... |
| Marland Production Co. | 981 | 981 | ..... | ..... | ..... |
| Grayburg Oil Co. | 575 | ..... | ..... | 575 | ..... |
| Plymouth Oil Co. | 204 | 204 | ..... | ..... | ..... |
| Phillips Petroleum Co. | 1,377 | 1,377 | ..... | ..... | ..... |
| Shell Petroleum Corp. | 6,010 | ..... | 6,010 | ..... | ..... |
| Savoy & Mazda Cos. | 660 | 660 | ..... | ..... | ..... |
| Simms Oil Co. | 8,181 | ..... | 8,181 | ..... | ..... |
| Skelly Oil Co. | 90 | 90 | ..... | ..... | ..... |
| TOTALS | 130,000 | 35,551 | 28,953 | 47,608 | 17,888 |



# "NATIONAL" *seamless steel couplings*



The "NATIONAL" line of couplings is designed to care for all your coupling requirements whatever size or type you may need.

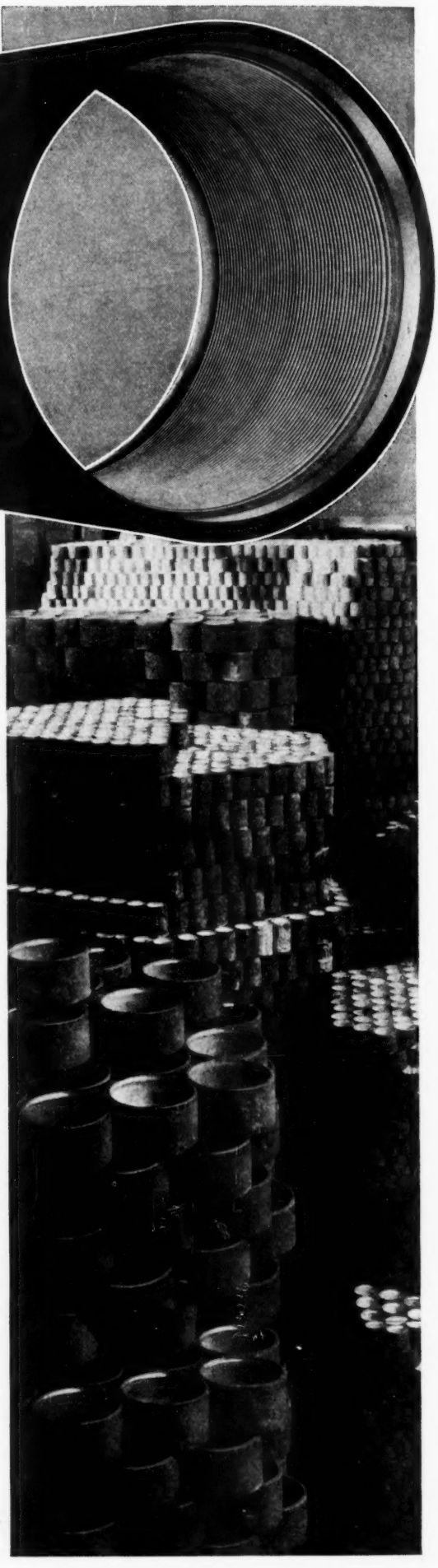
First, you are sure of uniformity in material and finished dimensions. Second, you are sure of one and the same high quality in performance on the job. Third, you are sure of a prompt and continuous supply from one source no matter how extensive or varied your requirements.

Every "NATIONAL" Coupling is made under the same ideal conditions—one organization controlling every operation from raw materials to finishing room. Special patented equipment is used for taper tapping; highly perfected threading practice insures ideal threads; improved electro-galvanizing methods prevent galling; a special high grade steel resists deformation and abrasive action; critical inspection after each operation insures a high degree of accuracy in all work performed.

"NATIONAL" Couplings conform in every way to the high standard performance of all "NATIONAL" Oil Country Tubular Products. When reconditioning your "NATIONAL" Pipe in the field, be sure to retain the same high standard of the original equipment by using "NATIONAL" Couplings.

*Your local Supply House will take care of your requirements.*

NATIONAL TUBE COMPANY
Subsidiary of United States Steel Corporation
*Frick Building, Pittsburgh, Pa.*



# Oklahoma Field Activities Increase; Earlsboro Pool Is Extended

By John Power
N. P. N. STAFF WRITER

TULSA, June 29

KLAHOMA apparently settled into its stride during the past week to produce a lot of oil during the summer. Two new wells were completed in the Oklahoma City pool. Imposing Wilcox production was found in the area northwest of the Allen pool.

The Southeast extension of the Earlsboro pool now appears capable not only of stopping the decline in Seminole production but actually making the district show an increase.

With no restrictive orders or agreements in force, development of likely spots is expected to continue at a lively rate in the Mid-Continent.

The Oklahoma City pool now boasts a production of more than 16,000 barrels daily from five wells. Of these, three are in the deep, or siliceous lime pay, while one, the Coline Oil Co. No. 1 Olds, in the CSE NW of 24-11N-2W is producing some 4000 barrels daily from an unidentified sand topped at 6300 feet. The other well, the Sinclair Oil & Gas Co.-Amerada Petroleum Corp. No. 1 Kintner, in the CNW SE of 30-11N-3W, is doing better than 1600 barrels, accompanied by some 50 million cubic feet of gas from a pay but little below 6100 feet. A table of the pool's production by wells accompanies this article.

Northwest of the Allen pool, which lies at the junction of Seminole, Hughes and Pontotoc counties, the Sinclair Oil & Gas Co. completed a well in the Wilcox for an initial production of 180 barrels per hour. The well, in the SW NW SE of 7-6-8 topped the sand at 4474. The pay was drilled three feet to a total depth of 4477. Subsequently the well was deepened to a total depth of 4379 making 3538 barrels in 24 hours. The gage for the 24 hours ending seven a.m. June 29 was about 2900 barrels.

A few days after the Sinclair completed its well Shell Petroleum Corp. drilled in its No. 1 Holacka, good for 2000 barrels daily in the Wilcox. The Shell well, in the SW NE SE of 7-6-8, a quarter mile east of the Sinclair producer, topped the Wilcox at 4190, drilled in to a total depth of 4193. The difference in depths at which the Sinclair and Shell wells encountered the Wilcox is accounted for by the nearly 275 feet of vertical correction necessary in the Sinclair well due to the crookedness of the hole.

On the southeast flank of the Earlsboro pool, separated by a scant mile, an extension has been found which may prove of considerable importance. There is room in uncondemned territory around the half dozen wells now in for an adult size oil field.

The discovery well was drilled by the Prairie in the SE NW of 18-9-6, having an initial production of some 4000 barrels. Offsetting this well on the east the Magnolia Petroleum Co. completed one of the best wells in the state in its No. 3 "A" Anderson, which is making more than 6000 barrels on the air lift.

A total of seven wells have been drilled in to the Wilcox sand in this new spot, having a gross production of better than 20,000 barrels. Of these seven, one is as yet hardly a completion, as it is cleaning out after a light shot, and swabbing some 200 barrels daily.

The accompanying map shows the present productive area in the extension, and its relation to the southeastern corner of the Earlsboro pool. A list of the completed wells and their approximate production follows.

| | |
|---|---|
| Prairie discovery well, SE NW 18-9-6 | 4450 barrels |
| Magnolia No. 3 "A" Anderson, SW NE sec. 18 | 6000 barrels |
| Magnolia No. 2 "A" Anderson SE NE sec. 18 (cl. out) | 200 barrels |
| Magnolia No. 1 "A" Anderson, SW SE NE of 18-9-6 | 2400 barrels |
| Magnolia No. 1 "D" Anderson NE NW SE of 18-9-6 | 2300 barrels |
| Magnolia No. 4 "A" Anderson NE SW of 18-9-6 | 2400 barrels |
| Gypsy Oil Co. No. 1 Payne NW NE SE of 18-9-6 | 3800 barrels |

Nine locations are active around the new play, either in the form of new locations on which rigs are being built or drilling wells already under way.

Affairs in the St. Louis pool extension took a turn for the worse with several of the wells drilling in the northeast portion of the extension getting water. Warner & Quinlan, No. 1 Light, in the NE SE of 18-7-4, got a hole full of it in the Simpson at a total depth of 4191. The Magnolia No. 2 Latimer, on the same farm as the Simpson discovery well, is swabbing 600 barrels daily but cutting three per cent from the Simpson topped at 4183 feet. A ten quart shot failed to bring the Gypsy's No. 1 Green, in the NW SE of 17-7-4 above the 350 barrel mark, which amount it is making from a total depth of 4166 in the Simpson.

### Notes on the Week in Kansas

The No. 1 Sellers wildcat of the Prairie Oil & Gas Co. and T. B. Slick in Russell county, Kans., definitely opens a pool whose worth can be determined only by future drilling. On June 27 its production on the pump was 217 barrels in 17 hours and on the following day it made 302 barrels in 24 hours.

It is producing from the Gorham lime pay topped at 3347 feet and has total depth of 3355½ feet at which depth it is still in the pay. Its location is in the SW NE of 36-15S-13W.

The nearest production is in the very small Bunker Hill pool some 12 miles north. The Sellers well is about 15 miles southeast of the town of Russell and is upward of 30 miles southeast of the Fairport pool, which was the discovery field of western Kansas several years ago.

* * *

On June 22 the Prairie Pipe Line Co. recorded the largest one day's pipe line runs ever made by any single pipe line company. Runs reached 222,000 barrels.

* * *

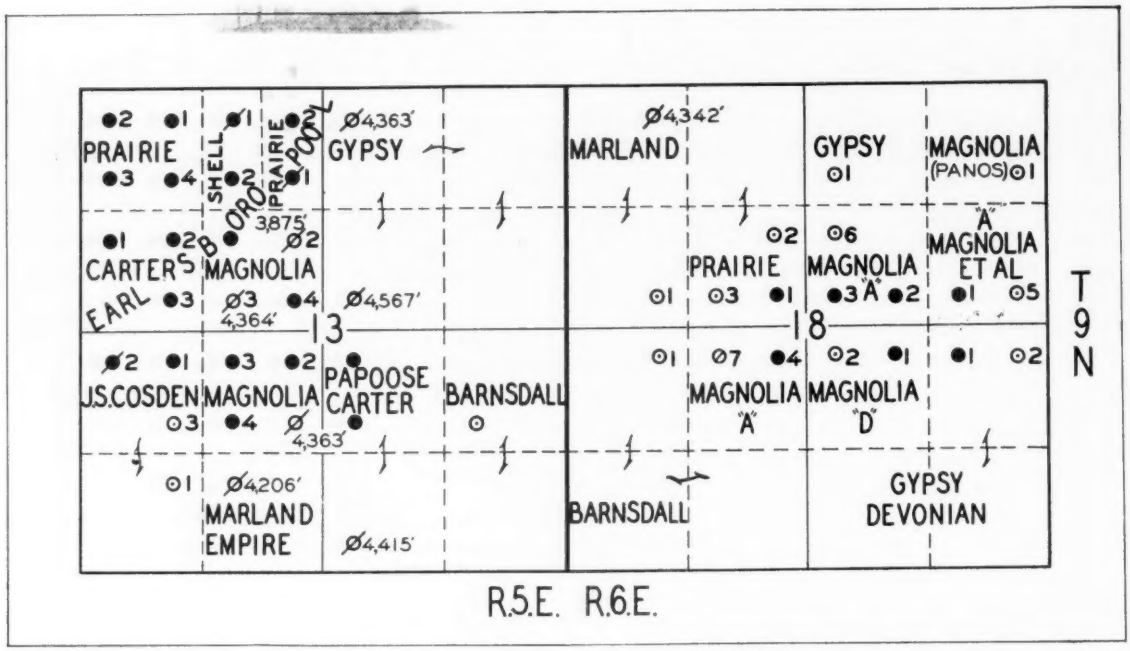
Another of the western Kansas wildcats that has been in the public eye is the Phillips Petroleum Co.'s test in the SW SW NE of 9-13S-19W, Ellis county. It is swabbing about 25 barrels per hour of 33 gravity oil. Sinclair Crude Oil Purchasing Co. is making arrangements to take the oil by tank car shipment. Pay in this well is 3593-95 feet.

* * *

The next location north of the Continental Oil Co. (Marland) sensational Goodrich well in Sedgwick county, Kans., had 800 feet of oil in the hole at the end of the week from chat pay found at 2977-3012 feet. This well, in the SW SE NW of 16-25S-1E, also is a Continental operation.

* * *

Some drilling is being conducted in McPherson county, Kans., where small wells have previously been developed in the chat formation. The




*Section 18-9-6 of the above map shows the southeast extension to Earlsboro pool. The producing wells shown on the west side of the map are in the southwest tip of the original pool*

McPherson Oil Co.'s test in NW SE SW of 1-20S-2W, southeast of McPherson, filled up 1400 feet with oil in two days, pay being found at 3057-61 feet.

* * *

**Notes on the Week**

Indian Territory Illuminating Oil Co.-Foster Petroleum Corp. have shut in their No. 1 Trosper as a gas well at about 6370 feet. The well, in the CNE SW of 13-11-3W, Oklahoma City pool, is estimated good for about 102 million cubic feet of gas per day.

* * *

Shell Petroleum Corp. No. 8 McCully, latest addition to the Logan county deep pool, was deepened three feet to 6037. Production increased from 5750 barrels to 6760 barrels daily. The well is in the SE SW SE of 30-19-4W.

* * *

Production of Oklahoma City Pool, June 28 and 29.

| Company | Well | Loc. | Prod. June 28 | Prod. June 29 |
|---|---|---|---|---|
| Mid-Kansas | No. 2 Fortson | C NW NE 24-11-3 | 6,735 | 5,667 |
| Coline Oil | No. 1 Olds | C SE NW 24-11-3 | 3,400 | 4,173 |
| Sinclair | No. 1 Stamper | NE SW NW 30-11-3 | 2,400 | 2,375 |
| Sinclair & Amerada | No. 1 Kintner | NW NW SE 30-11-3 | 1,670 | 1,640 |
| I. T. I. O. | No. 1 Okla. | S SE SE 24-11-3 | 2,258 | 2,206 |
| | | | 16,463 | 16,061 |

The I.T.I.O. No. 1 Park is the discovery well of the field. Besides the oil, it is making around 800 barrels of water daily.

## Sinclair Gets Well East Of Little River

(By Telegraph)

TULSA, July 1.—Prospects are brighter for the area southeast of the Mid-Continent Petroleum Corp.'s famous Smith lease in 5-7N-7E east of Little River. Sinclair Oil and Gas Co., has completed its No. 1 Phillips for 220 barrels hourly in the Wilcox topped at 4403 and drilled to 4413.

The Sinclair well in the NW NE SE of Sec. 5 is the farthest southeast producer in the area which so far has proved disappointing in all other directions from the Mid-Continent production which covers the west half of the northeast quarter of the section. By completing its No. 8 Smith for 205 barrels hourly the Mid-Continent brought its production on this lease to well over 10,000 barrels daily.

The McPherson Gas Co.'s No. 1 Ritz drilled on Shell Petroleum Corp. acreage in the NW SE SW of 1-20S-2W McPherson County, Kansas, opens considerable territory for chat production. The well made 368 barrels the first hour and 35 minutes after being drilled to 2966. This is the well referred to elsewhere in this issue as having a good showing the chat topped at 2935. The well is some 30 miles from the nearest pipe line which is in Sedgwick County.

## Miley Oil Properties Are Reorganized

LOS ANGELES, June 29.—Oil properties of E. J. Miley and of the Miley Oil Company have been reorganized and placed in a voting trust headed by William H. Neblett of the law firm of McAdoo, Neblett, O'Connor and Clagett. The new concern will be known as the Miley Petroleum Corp.

Total liabilities against the properties amount to over $2,000,000. These liabilities have been divided into two divisions: (1) secured creditors and those having unsecured claims for less than $1000; (2) unsecured claims of over $1000.

Creditors in the first division are to be paid in full in cash, and creditors in the second division are to receive gold bonds of the new corporation. Many creditors in the second division have already agreed to accept the bonds in settlement of their claims.

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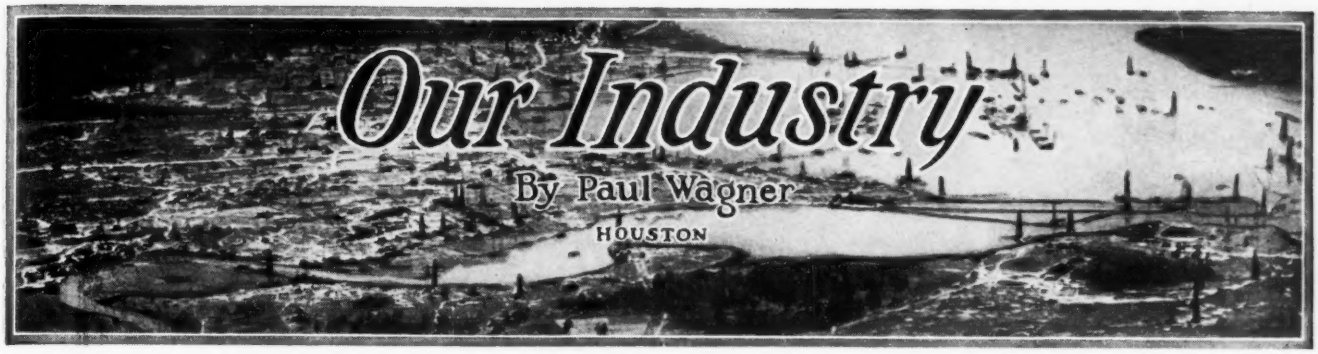
DENVER—Mrs. A. K. Barnes, wife of the general attorney for the Midwest Refining Co., died June 20 in Denver. Besides her husband, two sons survive.




**Harold N. Pardee, recently transferred to a production post in the Tulsa division organization of The Texas Co., was formerly assistant to the Fort Worth division manager, L. E. Barrows. Prior to that he was Winkler county, Texas, umpire under prorating practice. Mr. Pardee is a product of the oil country, having been born in Butler, Pa., May 1, 1891. At the age of 16 years he moved to California with his parents, finishing his education there.**

**His first work in the oil industry was for the Standard Oil Co. of California. Later, in 1912, he moved to Texas, becoming a tooldresser for the Old Producers Oil Co., subsidiary of The Texas Co., and in effect its producing department. Then he became a driller.**

**It was Mr. Pardee who drilled the No. 1 Parks well of The Texas Co., in Stephens county, a wildcat test that pointed the way to future opening of the general Ranger district by the Texas Pacific Coal & Oil Co. Joining Humble Oil & Refining Co., in December, 1918, Mr. Pardee was successively Desdemona field superintendent, Breckenridge district superintendent and central north Texas division superintendent at Cisco.**

**He resigned in 1925 to become general manager of the Landreth Production Co., which position he quit when Landreth properties were sold to other interests. He then operated independently until chosen umpire in the Winkler field early in 1928.**

* * *

**Kay C. Krick, vice president and director of the Logan Gas Co., Columbus, Ohio, holds similar official positions in the Ohio Fuel Gas Co., and the Preston Oil Co., all subsidiaries of the Columbia Gas & Electric Corp. His connection with the natural gas industry dates from 1903, when he moved from Texas to Columbus to become general contracting agent of the Logan Gas Co. Mr. Krick was born in Conneautville, Pa., July 13, 1869.**

* * *

**O. W. Killam, oil producer, refiner and royalty owner, is recognized as Laredo's most public spirited citizen. He drilled the discovery well of the Mirando field in 1921 and has been identified with petroleum along the Texas-Mexico border ever since. In addition to the Mirando Oil Co., and the Texpata Pipeline Co., he was organizer of the Misko Refineries, Inc., all operating in Laredo territory.**

**He has taken the lead in civic work of his city and has won wide recognition for his town-building activities in addition to industrial accomplishments. Before locating in Texas he represented Craig and Delaware counties in the Oklahoma senate, living at Grove.**

* * *

**M. B. Sweeney, production department manager of the Sun Oil Co., at Dallas, was recently elected chairman of the Howard-Glasscock prorating committee, handling the detail of operations in the Roberts-Settles field of West Texas. He succeeded Robert T. Piner, banker, of Big Spring, who represents Mrs. Dora Roberts, largest royalty owner in the Howard-Glasscock producing area.**

**Mr. Piner's other business necessitated his resignation, whereupon the advisory committee selected from among its number one of the best known production chiefs in Texas. Mr. Sweeney was for years located at Beaumont, in Gulf Coastal territory, before his removal to Dallas in the organization headed by J. Edgar Pew as vice-president and general manager.**

*M. B. Sweeney*

* * *

**Carl H. Beal, formerly a vice president of the Marland Oil Co. of California, has returned to Los Angeles headquarters after a trip to Europe, accompanied by Mrs. Beal. In addition to owning Kettleman Hills permits obtained under the federal land laws, Mr. Beal is engaged in consulting practice as a geologist.**

* * *

**Desaix B. Myers, chief geologist of the Union Oil Co. of California, Los Angeles, has been identified with his company's operations since 1922. At that time he gave up a consulting practice to join the Union. A year later he was appointed assistant chief geologist under C. R. (Rolfe) McCollum. He became chief geologist on Mr. McCollum's resignation, several years later, to join another company.**

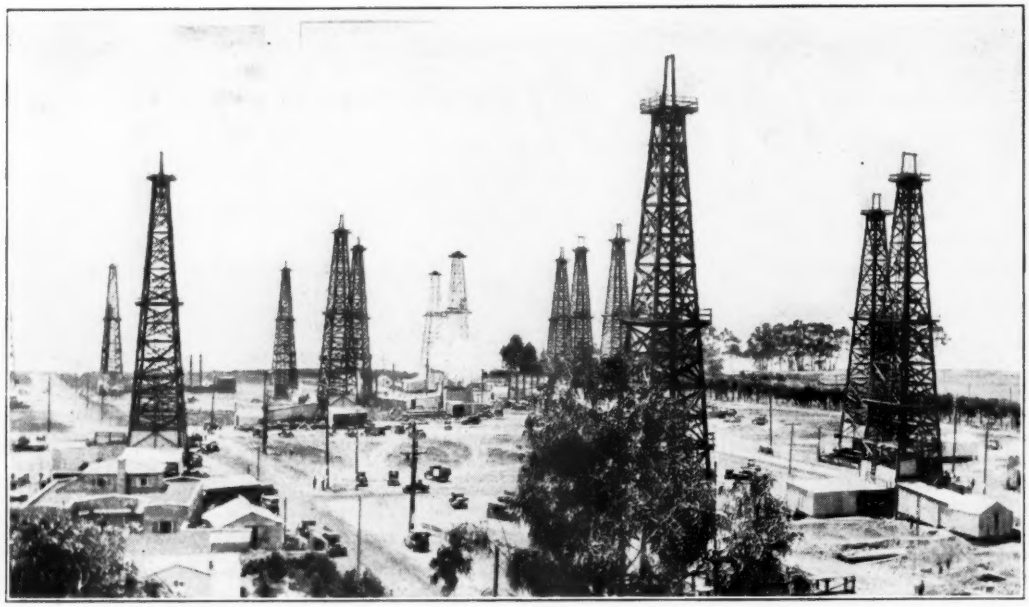
**Mr. Myers is a graduate of the Massachusetts Institute of Technology and widely known for his engineering as well as his geological activities. He was a major of engineers with the Seventy-Ninth Division at the front in the World War. He holds memberships in the American Institute of Mining & Metallurgical Engineers, the American Association of Petroleum Geologists and the American Society of Military Engineers.**

* * *

**Paul I. Fagan, formerly widely known in oil shipping circles of the Pacific Coast as principal in the San Francisco firm of Paul I. Fagan & Co., is spending the summer honeymooning in Europe. His bride is the former Mrs. Templeton Crocker of San Francisco.**

* * *

**G. A. Humason, J. P. Humason and J. A. Logan have incorporated the H. L. & H. Co., at Houston, capitalized at $65,000, to market a sand pump for oil wells. It is proposed, according to G. A. Humason, to establish a plant for manufacture of the pump as soon as possible.**



*A view of the Santa Barbara Mesa field with ocean in background. Several of wells toward ocean are now thought to be off structure*

# Oscar Howard Well Completed At Depth of 8006 Feet

LOS ANGELES, June 28

LIFTING of proration in California and the completion of new flush wells brought production to a new record during the past week. The lifting of proration was more responsible for the increase than new completions.

Seal Beach led the fields in increased output with an advance of 5000 barrels to give a total of 49,000 barrels for the week. This increase was caused almost entirely by two of the major producers lifting the lid on their production. Santa Fe Springs showed an addition of 3377 barrels to raise the field total to over 260,000 barrels, an increase caused by new completions. Huntington Beach and Inglewood each increased its output by 1000 barrels through cessation of curtailment.

Development in the Coastal fields still is attracting the attention of the California oil industry, as showings from several critical wells indicate that some promising finds may be expected from this area soon. Lincoln Drilling Co.'s well No. 1 on the shore line southwest of the Old Becker No. 1 wildcat, at Summerland, is reported to have drilled into 189 feet of solid oil sand between 1061 and 1250 feet.

A number of wells in the Santa Barbara Mesa field are expected to be either on commercial production or dry holes before the end of the coming week. Exeter Oil Co. at a depth of 2236 feet in its Edwards No. 1, an offset to the Olympic discovery well, has picked up oil showings and is being watched with interest.

Dunlap and Knapp, two Independent operators, have their Lemke well down to 2175 and between 2155 and the bottom of the hole recovered a core of 6 feet that contained some very good course oil sand. Preparations are being made to land eleven and three quarter inch casing in the shale capping penetrated between 2130 and 2155 feet.

General Petroleum Corp. is reported to be intending to construct a water pipe line from the ocean to its 14 drilling projects in the Mesa field if there is a recurrence of the break in the fresh water line that recently halted operations in that field for nearly a week.

Failure to obtain a successful water shutoff in the Barnsdall-Rio Grande interests' deep test at Elwood is thought to account for reports that this well would be abandoned. After drilling to 5667 feet and penetrating several good looking oil sands between 5300 and the bottom of the hole operators had so much difficulty in shutting out the water that it was decided to plug the hole back to a higher level but at a recent test the well was found to be still wet.

Barnsdall-Rio Grande joint interests added another good producer to their Elwood group with the completion of a Luton-Bell well for 4000 barrels from the shallow zone.

Deep zones at Santa Fe Springs yielded a new peak production of 243,377 barrels from 135 wells. Ten new completions added approximately 35,000 barrels per day to the field's output although natural decline offset this to give the field only a slight gain over the estimated figure for the preceding week.

Perhaps the most interesting completion of the week in this area, was that of the Oscar Howard interest's Hathaway No. 6. This well was completed from a total depth of 8006, in the Lower Clarke zone, for an initial production of 3120 barrels, and indicates a future for this deep sand of the Santa Fe Springs field.

ANOTHER completion that was indicative of what may be expected of the shallower zones at Santa Fe Springs was General Petroleum Corp.'s S. F. S. 222 completed in the Nordstrom zone at a depth of 5850 feet for 350 barrels. The Nordstrom is the smallest in area of the shallow zones and therefore may not be a criterion for those zones that lie immediately above or below it, but the fact that 202 wells in the shallow zones produce only 22,000 barrels of the field's total tends to indicate that overproduction will not be threatened by completions in these zones.

Final arrangements have been completed to put out the fire in the McKeon Drilling Co.'s No. 2, which has been burning for nearly three weeks resisting all efforts to control it. O. J. Rohde's McAdams No. 1, which was the first to catch fire is now flowing

approximately 3000 barrels of oil and 5,000,000 cubic feet of gas, per day. Engineers, who put the Rohde well out by means of wind machines from the movie lots of Hollywood, were unable to cope with the McKeon well in the same manner and had to dig a tunnel to the casing.

This tunnel is 75 feet in length and strikes the casing 40 feet beneath the surface, where a chamber 15 feet in diameter has been dug to allow workmen to tap the two lower casings.

Ten new completions in the Long Beach field failed to offset the natural decline. Production from 880 wells was estimated to be 172,000 barrels, 128,300 barrels of which came from 376 wells in the deep sands. Shell Oil Co. is drilling ahead in its Nesa No. 11 in the Signal Hill area with the bottom of the hole below 8900 feet. Drilling is proceeding at a slow pace to avoid mechanical difficulties, of which up to the present time the Nesa has been comparatively free.

Standard Oil Co. is coring ahead below 6440 feet in its No. 81, in Kettleman Hills, and expects to strike the oil sand very soon. Marland Oil Co.'s Elliott No. 12-8, offset to Milham Exploration Co.'s discovery well, is reported to be coring in oil sand below 6125 feet. A production test will be made within the next 200 feet if the oil formation continues good.

Milham Exploration Co. is reported to be coring gray sand in its Kennedy well two miles north of its discovery well. This gray sand overlies the oil zone and it is therefore thought that the Kennedy well has proved the Kettleman Hills structure for the intervening two miles. If this is true it will mean that the uplift extends from the Kennedy well, on the north, to General Petroleum Corp.'s Ochsner No. 2, eight miles to the south. Milhams well is at a depth of 6515 showing that it is lower on the structure than the wells to the south.

## Water in Yates

(*Continued from Page* 45)

oil has been the propelling force for most of the phenomenal potentialities shown on production tests.

Were the field opened to production above the 500,000 barrels daily level, which would invite damaging water encroachment, it is believed existing gas/oil ratios would be entirely dissipated in the topmost part of the structure. The field then would have to depend entirely on the natural water drive for its oil expulsion. Restrained production and even withdrawals of crude will continue to hold encroachment at a minimum, due to the careful handling of the field from the very start.

The fact that wells near the top of the structure have shown water on prorating test does, however, emphasize the necessity for continued restraint in avoidance of damaging encroachments. It is of note, in connection with the recent prorating tests, that reservoir pressures throughout the field now average 425 pounds, approximately what they have shown for months.

*Fred Rice*

*Dave B. Harris*

# Harris and Rice Get New Humble Jobs

HOUSTON, June 27.—Appointment of Dave B. Harris to be Gulf Coastal division general superintendent of Humble Oil & Refining Co., with Houston headquarters, has been followed by other organization shifts. M. (Bink) Manning becomes his assistant and Fred Rice, formerly of Shreveport, succeeds Mr. Harris as San Antonio division superintendent.

Until his transfer to the San Antonio district last winter, Mr. Harris was in charge of North Louisiana development and production with Shreveport headquarters. Mr. Rice had similar charge of Arkansas operations from Shreveport. After Mr. Harris was transferred, Mr. Rice took charge of the combined Louisiana-Arkansas territory until the Humble sold its producing properties in the two states to Standard Oil Co. of Louisiana, effective June 1.

## Completions in North Louisiana and Arkansas, Week Ended June 27, 1929

**Louisiana—Caddo Parish—Pine Island**

| Company | Well | Location | Depth | Yield |
|---|---|---|---|---|
| Dixie Oil Co. | Robertshaw No. 98 | 13-21-15 | 1744 | 15 bbls. |
| Eastern Carbon Co. | Black Bryson No. 4 | 8-17-16 | 2773 | 5M gas |

**DeSoto Parish**

| | | | | |
|---|---|---|---|---|
| Carlton Drilling Co. | Stephens No. 2 | 12-11-16 | 2046 | 10 bbls. |

**Morehouse Parish**

| | | | | |
|---|---|---|---|---|
| J. S. Harkness | Bowles No. 6 | 17-20-5E | 2229 | 5M gas |
| Nat. Gas Prods. Co. | Sandidge No. 1 | 10-20-4E | 2201 | 25M gas |

**Ouachita Parish**

| | | | | |
|---|---|---|---|---|
| United Oil & Gas Co. | Gutherie No. 4 | 49-20-4E | 2147 | 23M gas |
| Pipes & Mack | Cagle No. 1 | 7-18-5E | 2222 | 1 9/10M gas |

**Richland Parish**

| | | | | |
|---|---|---|---|---|
| Inter. Gas Prods Co. | Kathe Humble No. 1 | 35-16-6E | 2488 | 3/10M gas |

**Union Parish**

| | | | | |
|---|---|---|---|---|
| Palmer Corp | J. W. Downey No. 1 | 12-20-3E | 2169 | 6M gas |

**EAST TEXAS—Harrison County**

| Company | Well | Location | Depth | Yield |
|---|---|---|---|---|
| Nick Barbare | Fuller-Furrh No. 2 | James Short HRS | 2380 | 1M gas |
| C. H. Lyons | Rudd No. 1 | W. R. Anderson HRS | 2373 | 2M gas |

**Panola County**

| | | | | |
|---|---|---|---|---|
| Magnolia Pet. Co. | Fletcher No. 3 | B. C. Jordan HRS | 2999 | junked, aband. |

**ARKANSAS—Rainbow City—Union County**

| | | | | |
|---|---|---|---|---|
| H. L. Hunt | Gregory No. 7 | 10-17-14 | 3248 | 75 bbls. |
| Lion O. & R. Co. | El Dorado Realty No. 1 | 7-17-13 | 3067 | salt water abd. |
| Ohio Oil Co. | M. H. Nash No. 1 | 7-17-13 | 3086 | 5M gas |

**Smackover—Ouachita County**

| | | | | |
|---|---|---|---|---|
| Sinclair O. & G. Co. | Berry No. 12 | 35-15-15 | 2015 | 125 bbls. |

**Smackover—Union County**

| | | | | |
|---|---|---|---|---|
| Skelly Oil Co. | Bilyew A-8 | 8-16-15 | 2080 | 20 bbls. |

# Completions in Oklahoma and Kansas, Week Ended June 29, 1929

## OKLAHOMA

### Carter County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Magnolia | 2 | NEc SW 30-1-3 W | 2658-2762 | 185 |

### Cotton County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Moore | 3 | SEc NE NE SW 2-2-10 W | 2174-2200 | 115 |

### Creek County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Roxaline | 1 | C SE SE 28-17-12 E | 1778-1793 | 3M |
| Ray et al | 3 | CNL NE NE 13-17-10 E | 2254-2286 | 2.5M |
| Irelan et al | 1 | CEL SW SE 11-17-10 E | 1925-1937 | 12 |
| Silurian-Houston | 2 | SE SW SE 6-19-7 E | 3143-3158 | 90 |
| Atlantic | 2 | SW NE NW 23-14-10 E | T.D. 3275 | Dry |
| Slick et al | 1 | NWc SE 16-16-10 E | T.D. 3333 | Dry |
| O'Hair et al | 1 | SEc 32-18-10 E | T.D. 3468 | Dry |
| Sherry et al | 1 | NEc SW 20-18-10 E | T.D. 3038 | Dry |
| Murphy | 1 | SWc NE SW 35-19-8 E | T.D. 3245 | Dry |
| Prairie | 2 | NWc SW 16-14-8 | T.D. 3864 | Dry |

### Dewey County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Huckelby-McCoy | 1 | NEc 9-18-15 W | T.D. 4506 | Dry |

### Grant County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Champlin | 1 | SE NE SE 15-27-3 W | T.D. 4315 | Dry |

### Jefferson County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Beck | 3 | SWc SE 34-6-5 W | 1176-1201 | 200 |
| Cox-Robinson | 1 | SEc NE SW 34-6-5 W | 1565-1567 | 30 |

### Kay County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Wilson et al | 1 | SEc 23-27-1 E | 845-850 | ¼M |
| Harris-Haun | 3 | SEc SW NW NE 36-28-1 W | T.D. 835 | Dry |

### Logan County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Shell | 5 | NW SE NE 30-19-4 W | 5758-5989 | 1445 |

### Noble County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Prairie | 1 | SWc NE 33-21-1 W | 3414-3437 | 28M |

### Okfuskee County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Prairie | 3 | NW SE SE 29-12-10 | 3115-3150 | 20 (1 Hr.) |
| Prairie | 2 | SEc SE SW 29-12-10 | 3129-3142 | 18M |
| Robinson et al | 4 | SWc NW SE 35-11-9 E | 1469-1475 | 12 |
| Minnehoma | 1 | NW SW SE 29-12-10 E | 3108-3152 | 50&5M |
| Kingwood-Umburn | 2 | NWc NE SW 2-10-11 E | T.D. 1800 | Dry |
| Prairie | 1 | NWc NE 2-11-9 | T.D. 4035 | Dry |

### Okmulgee County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Amer. Maracaibo | 1 | NEc SW 17-13-11 E | T.D. 3225 | Dry |
| Wier-Cramer | 3 | SWc NW SE 4-11-12 E | 1514-1560 | 20 |

### Osage County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Lewis Prod. et al | 4 | NE SE SE 15-26-6 E | 2955-2991 | 325 |
| Okla. Power & Water | 119 | SEc SW SW 4-20-10 E | 1664-1679 | 4M |
| Craig | 5 | SW NW NE 8-22-11 E | 1864-1899 | 10 |
| Branstetter-Barnsdall | 3 | NEc SW NE SE 22-22-11 E | 1654-1700 | 15 |
| I. T. I. O. | 3 | NE NW SW 28-23-9 E | 330-346 | 3 |
| I. T. I. O. | 1 | NWc SE 16-28-8 E | 2358-2385 | 10 |

### Pawnee County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Edwards et al | 1 | SEc NW NW SW 30-21-9 E | 850-858 | 20 |
| Devonian | 2 | NW SE SW 26-20-9 E | 2050-2080 | 30 |

### Pottawatomie County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Tidal | 1 | NEc 12-8-4 E | T.D. 4550 | Dry |
| Tidal | 2 | NW NE NE 12-8-4 E | T.D. 4394 | Dry |
| Twin State | 3 | SE NE SW 7-8-5 E | T.D. 4548 | Dry |
| Prairie | 1 | NWc SE NE 18-7-5 E | T.D. 4156 | Dry |
| Prairie | 1 | SWc NE 17-7-4 E | 4143-4145 | 1530 |
| Mid-Continent | 4 | NW SE SW 5-9-5 E | 4432-4440 | 130 |

### Seminole County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Prairie | 1 | SEc SE NW 18-9-6 E | 4228-4236 | 1080 |
| Prairie | 3 | NEc NW NW 26-7-6 E | 3119-3143 | 350 |
| Prairie | 4 | SEc NW NW 26-7-6 E | 3170-3180 | 410 |
| Prairie | 1 | NWc NE NE 18-9-7 E | 4265-4306 | 20 |
| Prairie | 1 | NE SE NW 5-7-7 | 4363-4369 | 470 |
| Barnsdall | 4 | SE NE SE 22-7-6 E | 3095-3105 | 1125 |
| Pine | 1 | SW NE SW 13-7-6 E | 3350-3400 | 82M |
| Sinclair | 3 | NEc NW 11-8-5 E | 4161-4165 | 60 |
| Sinclair | 2 | SW NE NW 11-8-5 E | 4125-4140 | 80 |
| Magnolia | 1 | NE NW SE 18-9-6 E | 4358-4370 | 2375 |
| Sinclair | 1 | NE NW SE 24-9-5 E | 4245-4251 | 585 |
| Carter | 1 | SWc 4-8-6 E | T.D. 4923 | Dry |
| Carter | 1 | SE SW NW 26-7-6 E | T.D. 3380 | Dry |
| Prairie | 4 | SEc NW NE 24-9-5 E | T.D. 4250 | Dry |
| Prairie | 1 | NWc NE SW 36-7-6 E | T.D. 4624 | Dry |

### Stephens County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Ellis Drlg | 1 | SWc NE 4-3-7 W | T.D. 2425 | Dry |
| Ven-Mex & Mid-Cont. | 1 | C NW NW 2-2-8 W | 1919-1922 | 7 |
| Lone Eagle | 10 | NEc NW NW SE 34-1-8 W | 1840-1852 | 115 |
| Hupp-Duff | 5 | SEc SW SW NE 34-1-8 W | 1848-1852 | 60 |

## KANSAS

### Butler County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Garden | 1 | SEc SW 13-27-5 E | T.D. 3190 | Dry |

### Cowley County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Prairie | 5 | CWL NW NW 15-32-4 | 3256-3260 | 914 |

### Edwards County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Brit. Amer | 1 | NEc NW 31-25-17 W | 4525-4571 | 40&7M |

### Ellis County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Phillips | 1 | NWc 20-12-17 W | 3429-3439 | 50 |

### Greenwood County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Prairie | 1 | NEc SW SE 15-25-11 E | T.D. 1849 | Dry |

### Rush County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Wilcox | 1 | NE NW SW 27-17-17 W | T.D. 3730 | Dry |

### Russell County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Keys Pet | 11 | NE SW NE 32-13-15 W | T.D. 1900 | Dry |

### Sedgwick County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Richards-Haun | 1 | SWc NW NE SE 36-25-1 W | T.D. 3434 | Dry |
| Bu Vi Bar et al | 4 | SE SW SW 6-26-1 E | 3365-3375 | 485 |
| Robertson et al | 1 | SWc 6-26-1 E | 3373-3376 | 700 |
| Bu Vi Bar et al | 3 | NEc SE NW 7-26-1 E | 3370-3379 | 695 |
| Bu Vi Bar et al | 3 | SW NE SE 12-26-1 W | 3356-3363 | 1600 |

### Sumner County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Marland | 1 | NWc SW 26-34-2 E | 3444-3485 | 2M |

### Trego County

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Central Com. | 1 | NE SW NE 20-13-21 W | 3960-3972 | 175 |

# Completions in California, Week Ended June 22, 1929

### Long Beach

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Union Oil Co. | Temple 1 | .... | 7118 | 565 |

### Santa Fe Springs

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Bandini Pet. Corp. | Off 10 | .... | 6850 | 10000 |
| General Pet. Corp. | S. F. 168D | .... | 6593 | 3932 |
| General Pet. Corp. | S. F. 207 | .... | 6516 | 3500 |
| General Pet. Corp. | S. F. 221 | .... | 6678 | 7150 |
| General Pet. Corp. | S. F. 233 | .... | 6608 | 7845 |
| Geo. F. Getty | S. F. 8 | .... | 6680 | 4500 |
| The Texas Co. | Standlee 3 | .... | 5027 | 523 |
| The Texas Co. | Steinly 5 | .... | 6397 | 1794 |
| The Texas Co. | Wickman 4 | .... | 6363 | 8556 |
| Standard Oil | Walker 14 | .... | 6470 | 1300 |

### Seal Beach

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Assoc. Oil Co. | Bryant 2 | .... | 5650 | 1470 |
| Marland Oil Co. | Bixby 4 | .... | 5692 | 2425 |

### Athens-Rosecrans

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Union Oil Co. | Rosecrans 11 | .... | 5615 | 600 |
| Barnsdall Oil Co. | O'Dea 3A | .... | 5245 | 1210 |

### Brea-Olinda

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Union Oil Co. | Naranjal 14 | .... | 5350 | 102 |

### West Coyote

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Standard Oil Co. | Emery 44 | .... | 4110 | 250 |

### Ventura Avenue

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Shell Oil Co. | Gosnell 31 | .... | 7485 | 680 |

### Elwood

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Barnsdall Oil Co. | Luton-Bell 7 | .... | 3547 | 5000 |

### Mt. Poso Creek

| Company | Well No. | Location | Depth | Init. Prod. |
|---|---|---|---|---|
| Pet. Securities Oil Co. | Glide 15 | .... | 1870 | Shut-in |

# New Field Operations in Oklahoma, Kansas, North, North Central, East Central, Panhandle and West Texas, Week Ended June 29, 1929

## OKLAHOMA

### Carter County

| Company | Well No. & Farm | Location |
|---|---|---|
| Cotton Belt | 9-Rexroat | NEc NW NE SW 10-4-2 W |
| Ven-Mex | 1-See | SE SW SE 23-1-3 W |

### Cotton County

| Company | Well No. & Farm | Location |
|---|---|---|
| Silurian | 2-Chambers | SWc NE NW 2-2-10 W |
| Moore et al | 3-Chambers | CWL SE SE NW 2-2-10 W |

### Creek County

| Company | Well No. & Farm | Location |
|---|---|---|
| Billingslea-Riverland | 1-Deere | NEc SW NE 28-14-10 E |
| Bryan et al | 2-Jackson | NEc NW SW 8-16-11 E |
| Murphy et al | 1.... | SWc NE SW 12-17-11 E |
| Ireland et al | 1.... | CWL NE SW 11-17-10 E |
| Sherry et al | 1-Welch | NWc SW 24-19-9 E |

### Hughes County

| Company | Well No. & Farm | Location |
|---|---|---|
| Prairie | 1-Cheparney | NWc NW SE 7-8-9 E |

### Jefferson County

| Company | Well No. & Farm | Location |
|---|---|---|
| Sigler-McGinley | 1-Jones | SEc SW NW 16-7-5 W |
| Beck-Lapham | 4-Seay | NE SE SW 34-6-5 W |

### Kingfisher County

| Company | Well No. & Farm | Location | |
|---|---|---|---|
| Brown | 1.... | C NW SE 6-16-7 W | OWD |

### Okfuskee County

| Company | Well No. & Farm | Location |
|---|---|---|
| Vierson-Walters | 1-Barnett | C NW NE 4-10-11 E |
| Champlin | 3-Jefferson | SWc 14-11-11 E |
| Vierson-Walters | 1-Barnett | NWc NE 9-10-11 E |

| Company | Well No. & Farm | Location |
|---|---|---|
| Hazlett et al | 1-Johnson | NEc SE NE 3-10-11 E |
| Milmac | 1-Bullett | SEc SW NE 27-12-12 E |
| McMahon-Carey | 2-Sproleder | SE SW SE 29-12-10 E |
| Prairie | 5-Monarye | SEc SE SE 29-12-10 |

### Okmulgee County

| Company | Well No. & Farm | Location | |
|---|---|---|---|
| Wilder et al | 1-Richards | NWc 33-14-12 E | |
| Sheridan | 4-Grayson | SEc NE NW SW 3-15-11 E | OWD |
| Bright et al | 1-James | SEc 31-15-12 | |
| Thompson-Jordan et al. | 1-Cole | NEc SE SW 28-15-12 E | OWD |
| Whitefield et al | 7-Grayson | SWc NW NE SW 3-15-11 E | OWD |

### Osage County

| Company | Well No. & Farm | Location |
|---|---|---|
| I. T. I. O. | 410.... | SEc SW SW NW 8-24-9 E |
| Peters—P. & R. Corp. | 1.... | SEc SW 22-27-11 E |
| Peters | 4.... | SW SE SE 22-27-11 E |
| Osage | 1.... | SWc 29-28-11 E |

### Pawnee County

| Company | Well No. & Farm | Location |
|---|---|---|
| Adamson et al | 5-Thomas | SW NE NW 25-21-8 E |

### Payne County

| Company | Well No. & Farm | Location |
|---|---|---|
| Cons. Drlg | 1-Freeman | SWc 4-18-6 E |

### Pottawatomie County

| Company | Well No. & Farm | Location |
|---|---|---|
| Prairie | 4-Laster | SWc SE NE 19-6-4 E |

(*Continued on Page 55*)

# New Field Operations in Oklahoma, Kansas, North, North Central, East Central, Panhandle and West Texas, Week Ended June 29, 1929

(*Continued from Page 54*)

### Seminole County

| Company | Well No. & Farm | Location |
|---|---|---|
| Prairie | 2-Raitman | NEc SE NW 18-9-6 E |
| Prairie | 3-Raitman | SWc SE NW 18-9-6 E |
| Prairie | 1-Calkins | NWc NW SW 17-9-6 E |
| Prairie | 1-Polk | NEc NE NW 15-9-6 E |
| Prairie | 1-Anna | NWc SE 31-6-7 E |

### Stephens County

| | | |
|---|---|---|
| Ven-Mex-Mid-Continent | 1-Bush | C SW NW 3-2-8 W |
| Magnolia | 6-Peck | SEc SW 13-2-8 W |
| American PL | 7-Dexter | CEL SE NW 34-1-8 W |
| Lone Eagle | 11-Simpson | SWc NE NW SE 34-1-8 W |
| Ven-Mex&Mid. Cont. | 7-Nigh | C NE NW 34-1-8 W |
| Ellis Drlg | 4-Ketchum | SEc NE NW NW 25-1-9 W |
| Clark-Cowden | 5-Davison | SW NW SW 13-1-4 W |

## KANSAS

### Butler County

| | | |
|---|---|---|
| Southbrook | 1-Joseph | SE NW SE 25-24-3 E |
| Richmond Drlg | 3-Brissey | NWc SE 8-27-6 E |
| Empire | 1-DeFore | NEc NW 36-29-4 E |

### Chautauqua County

| | | |
|---|---|---|
| Prairie | 1-White | NE NE 15-34-8 E |

### Cowley County

| | | |
|---|---|---|
| Prairie | 1-Roberts | SE SE 7-33-3 E |
| Landon | 1-Daniels | NEc SE 6-30-5 E |
| Wakefield et al | 1-Daniels | SE SW SE 7-30-5E |

### Greenwood County

| | | |
|---|---|---|
| Empire | 1-Nicoll | NWc NE 28-22-10 E |
| Phillips | 1-Beal | NE NW NE 28-23-11 E |
| Bitler-Hays | 1-Hammond | SWc NE 3-25-10 E |
| Phillips | 5-Pixlee | SW SE NW 10-22-10 E |
| Empire | 2-Holderman | NE SE SW 15-22-12 E |
| Texas | 7-Edwards | SE SW SE 21-23-11 E |

### Harper County

| | | |
|---|---|---|
| Slick et al | 1-Thompson | NWc 19-32-6 W |

### Marion County

| | | |
|---|---|---|
| Davis | 3-Rample | SE SW NW 7-19-3 E |

### Morton County

| | | |
|---|---|---|
| White-Chaney et al. I | | NEc 34-34-43 W |

### Saline County

| | | |
|---|---|---|
| Templeman Bros. | 1-Lanbengayer | C SW 20-15-5 W |
| Austin et al | 1-Olsen | SWc SE 10-15-4 W |

### Sedgwick County

| | | |
|---|---|---|
| Bu Vi Bar et al | 7-Carr | NEc SW 1-26-1 W |
| Bu Vi Bar et al | 3-Lantz | NWc SE SE 12-26-1 W |
| Boyle-Woods | 1-Sandusky | NW NE SE 34-26-1 W |
| Marland | 1-Semsroth | NWc 25-28-4 W |

### Sumner County

| | | |
|---|---|---|
| Derby et al | 1-Norrish | NWc 35-34-2 E |
| Shell | 2-Miller | SW SE SW 17-32-2 E |
| Prairie | 2-Post | NE NE 34-34-2 E |
| Prairie | 1-Fitch | NE SW NW 3-35-2 E |

## TEXAS

## NORTH CENTRAL AND EAST CENTRAL

### Brown County

| | | | |
|---|---|---|---|
| Humble | 21-Armstrong | Sec-1 Blk-789 | Survey: Delgado |
| Humble | 20-Armstrong | Sec-1 Blk-789 | Delgado |
| Gore-Brown | 1-Dalney | Sec-15 Blk-25 | Cherry |
| Ven-Mex | 5-Hickman | Blk-801 | McGloin |
| Drake et al | 1-Robertson | Blk-3 | SA&MG |
| Green Prod | 2-McCulley | Blk-53 | Thom |
| Ditto Oil Int | 5-Richardson | ..... | SA&MG |
| Harea | 1-Churchill | Blk-141 | Curbier |
| Buder | 4-Cross | Blk-623 | Honeycutt |
| Brown et al | 1-McIntosh | Sec-28 | McIntosh |

### Callahan County

| | | | |
|---|---|---|---|
| Texas Pacific | 14-Westerman | Sec-54 | Comal Co. Sch. Ld. |
| Richards | 1-Garsuch | Sec-57 | BBB&C |
| Moutray | 1-Owens | Sec-20 | D&DA |
| Moutray | 18-Flores | Sec-149 | BBB&C |
| Grass Roots | 9-Kultz | Blk-43 | Comal Co. Sch. Ld. |
| Mook Texas et al | 1-Johnson et al. | Blk-83 | Comal Co. Sch. Ld. |

### Coleman County

| | | | |
|---|---|---|---|
| Wilmott | 1-Vaughn | Blk-79 | Bond et al. |
| Eastland et al | 1-Kenney | Sec-3 Blk-269 | Cochran |
| Broderick-Calvert | 1-Bennett | Sec-42 Blk-480 | Johnson |
| Weathered | 1-Dalton | Blk-156 | Slayton |

### Eastland County

| | | | |
|---|---|---|---|
| Conway Bros.-Champlin | 4-Simmons | Blk-27 | McClennon Co. Sch. Ld. |
| States | 6-Hise Est. | Sec-17 Blk-4 | H&TC |
| Craff-McNeil-Canyon | 3-Turner | Sec-30 Blk-2 | H&TC |
| Te X-Wa Oil Co., & Kirk | 1-Palmer | Sec-29 Blk-2 | H&TC |

### Jack County

| | | | |
|---|---|---|---|
| Harper et al | 4-Box | ..... | Hughson |
| Knight et al | 1-Loving | Sec-2735 | TE&L |
| F. H. E. Oil Co | 2-Leffel | ..... | Hughson |
| Bryson | 1-Loving | ..... | T&NO |

### Navarro County

| | | | |
|---|---|---|---|
| Riverland | 1-Finch | ..... | Hardeman |

### Palo Pinto County

| | | | |
|---|---|---|---|
| Lindsay Drlg | 1-Costello | ..... | Castleman |

### Shackleford County

| | | | |
|---|---|---|---|
| Cranfill-Reynolds | 1-Diller Bros. | Sec-5 | ET |
| Callahan et al | 8-Nail | Sec-150 | ET |
| Grisham-Hunter | 2-Davis | Sec-17 Blk-13 | T&P |
| Manning et al | 3-Reynolds | Sec-11 Blk-11 | T&P |
| Roeser-Pendleton | 1A146-Cook | Sec-146 | ET |
| Humble | 2-Newell | Sec-87 | ET |
| Roeser-Pendleton | 6A88-Cook | Sec-88 | ET |
| Roeser-Pendleton | 5A88-Cook | Sec-88 | ET |
| Roeser-Pendleton | 4A88-Cook | Sec-88 | ET |
| Roeser-Pendleton | 12A83-Cook | Sec-83 | ET |
| Roeser-Pendleton | 42A61-Cook | Sec-61 | ET |
| Roeser-Pendleton | 41A61-Cook | Sec-61 | ET |
| Moutray | 1-Bowman | Sec-77 Blk-12 | T&P |
| Cranfill-Reynolds | 3-Moberly | Sec-48 Blk-11 | T&P |
| Oyster-Rife | 1-Davis | Sec-15 Blk-14 | T&P |
| Gilman-McMurray | 2-Mathews | Sec-2 | ET |

## NORTH TEXAS

| Company | Well No. & Farm | Location | |
|---|---|---|---|
| Josey et al | 3-Prideaux | Blk-24 | Dorsey |
| Atlantic et al | 3-Andrews | ..... | Whitaker |
| Boller | 1-Peters | ..... | I&GN |
| Humble | 4-Kunkel | Sec-3 | BBB&C |
| Pet. Prod. et al | 5-Phillips | ..... | BBB&C |
| Kemrow | 6-Campbell | League-3 Blk-1 | DCSL |
| Continental | 5-Richardson | Blk-10 | McCoy |
| Maxon Jr. | 1-Green | ..... | Levins |
| Humble | 9-Logan | ..... | Armes |
| Continental | 1-Falls Co. Sch. Ld. | Blk-16 | FCSL |
| Gholke | 6-Wilson | Blk-25 | Geraldine |
| Payne et al | 5-Parrish | ..... | SP |
| Fain-McGaha | 3-Taylor | Sec-17 Blk-11 | ATNCL |

### Cooke County

| | | | |
|---|---|---|---|
| Faith | 1-Green | ..... | Davidson |
| Faith | 1-Campbell | ..... | Leverett |

### Clay County

| | | | |
|---|---|---|---|
| Merrick-Belcher | 1-Lanchum | Blk-5 | Parker Co. Sch. Ld. |

### Grayson County

| | | | |
|---|---|---|---|
| Sherman | 2-Dalton | ..... | Ingram |
| F. H. E. Oil Co | 1-Getzenbaner | ..... | Loveall |
| Bell | 1-Cown | ..... | Grace |

### Wichita County

| | | | |
|---|---|---|---|
| Mount | 1-Myers | Blk-6 | RRV Lands |
| Reno | 1-Williams et al. | Blk-5 | McCool |
| Panhandle | 6-Burnett | ..... | Meade |

### Wilbarger County

| | | | |
|---|---|---|---|
| Fain-McGaha | W-11-Waggoner | Sec-32 Blk-4 | H&TC |
| Fain-McGaha | W-10-Waggoner | Sec-32 Blk-4 | H&TC |
| Fain-McGaha | W-9-Waggoner | Sec-32 Blk-4 | G&TC |
| Staley-Wynne | S-2-Waggoner | Sec-25 Blk-4 | H&TC |
| Lewis-Payne | 4-Waggoner | Sec-17 Blk-4 | H&TC |
| Shaw | G-6-Waggoner | Sec-40 | MEP&P |
| Melot | A-8-Waggoner | Sec-10 Blk-4 | H&TC |
| Phillips | 0-3-Waggoner | Sec-45 Blk-4 | H&TC |
| Phillips | RR-3-Waggoner | Sec-44 Blk-4 | H&TC |
| Fain-McGaha | W-12-Waggoner | Sec-32 Blk-4 | H&TC |

### Young County

| | | | |
|---|---|---|---|
| Simms | 3-Willis | Sec-2047 | TE&L |
| Kleiner et al | 29-Langston | Sec-1490 | TE&L |
| Strahan | 1-Boone | ..... | BBB&C |
| Republic Prod | 3-Haygood | Sec-1468 | TE&L |
| Brandstreet et al | 3-Richardson | ..... | Mauphin |
| Trio | 1-Williams | ..... | Adams |
| Steed-Gans | 1-Blackman | ..... | Wilson |
| Dixon et al | 1-Cardwell | Sec-233 | TE&L |
| Perkins-Cullum | 2-Perkins et al. | Sec-10 | ATNCL |

## PANHANDLE

### Carson County

| | | | |
|---|---|---|---|
| Texas | 2-Quinn | Sec-7 Blk-9 | I&GN |
| Empire | 18-Burnett Est. | Sec-96 Blk-5 | I&GN |
| Empire | 17-Burnett Est. | Sec-78 Blk-4 | I&GN |
| Skelly | 17-Schaeffer | Sec-198 Blk-3 | I&GN |

### Gray County

| | | | |
|---|---|---|---|
| Empire | 1-Noel | Sec-151 Blk-3 | I&GN |
| Texas | 4-Combs et al. | Sec-36 Blk-3 | I&GN |
| Texas | 3-Combs et al. | Sec-36 Blk-3 | I&GN |
| Gulf Prod | 8-Bowers | Sec-89 Blk-B-2 | H&GN |
| Gulf Prod | 10-Bowers | Sec-89 Blk-B-2 | H&GN |
| Gulf Prod | 9-Bowers | Sec-89 Blk-B-2 | H&GN |
| Gulf Prod | 11-Bowers | Sec-89 Blk-B-2 | H&GN |
| Anderson | 1-Valmert | Sec-140 Blk-3 | I&GN |
| Sherwood et al | 1-Gettings | Sec-14 Blk-A-9 | H&GN |
| Lyon et al | 1-Morse | Sec-2 Blk-26 | H&GN |
| Quilin et al | 1-Barrett | Sec-131 Blk-3 | I&GN |
| Skelly | 4-North Jackson | Sec-90 Blk-B-2 | H&GN |
| McMann | 2-Jackson | Sec-90 Blk-B-2 | H&GN |
| Texas | 13-Bowers | Sec-89 Blk-B-2 | H&GN |
| Texas | 14-Bowers | Sec-89 Blk-B-2 | H&GN |
| British American | 2-Purviance | Sec-61 Blk-B-2 | H&GN |
| Gulf Prod | 5-Jackson | Sec-62 Blk-B-2 | H&GN |
| Gulf Prod | 6-Jackson | Sec-62 Blk-B-2 | H&GN |
| Gulf Prod | 7-Jackson | Sec-62 Blk-B-2 | H&GN |
| Humble | 2-Jackson | Sec-90 Blk-B-2 | H&GN |
| Magnolia | 3-Bowers | Sec-63 Blk-B-2 | H&GN |
| Magnolia | 6-Bowers | Sec-63 Blk-B-2 | H&GN |
| Phillips | 6-Jackson | Sec-88 Blk-B-2 | H&GN |
| Phillips | 6-Jackson | Sec-88 Blk-B-2 | H&GN |
| Sun | 3-Purviance | Sec-61 Blk-B-2 | H&GN |
| Texas | 11-Bowers | Sec-89 Blk-B-2 | H&GN |
| Texas | 12-Bowers | Sec-63 Blk-B-2 | H&GN |
| Texas | 4-Patton | Sec-61 Blk-B-2 | H&GN |
| Texas | 5-Patton | Sec-61 Blk-B-2 | H&GN |
| McMan | 2-Palmer | Sec-31 Blk-B-2 | H&GN |
| Danciger | 2-Beck | Sec-28 Blk-B-2 | H&GN |
| Danciger | 3-Beck | Sec-28 Blk-B-2 | H&GN |
| Marland | 5-Brown | Sec-32 Blk-B-2 | H&GN |
| Texas | 5-Faulkner | Sec-29 Blk-B-2 | H&GN |
| Texas | 6-Faulkner | Sec-29 Blk-B-2 | H&GN |
| Texas | 5-Williams | Sec-7 Blk-1 | ACH&B |

### Hutchinson County

| | | | |
|---|---|---|---|
| Alamosa | 1-Sanford | Sec-83 Blk-46 | H&TC |
| Phillips | 1-Johnson | Sec-38 Blk-Y | A&B |
| Phillips | 1-Johnson | Sec-36 Blk-Y | A&B |
| Rock Creek | 4-Johnson | Sec-28 Blk-Y | A&B |

### Moore County

| | | | |
|---|---|---|---|
| Skelly | 10-Armstrong | ..... | Brazemore |

### Wheeler County

| | | | |
|---|---|---|---|
| Gibson | 8-Bently | Sec-42 Blk-24 | H&GN |
| Lone Star | 1-Martin | Sec-52 Blk-17 | H&GN |

## WEST TEXAS

### Glasscock County

| | | | |
|---|---|---|---|
| Penn | 1-Shaffer | Sec-4 Blk-32 | T&P |

### Howard County

| | | | |
|---|---|---|---|
| Merrick-Lamb | 8-Clay | Sec-126 Blk-29 | W&NW |
| California | 7-Roberts | Sec-137 Blk-29 | W&NW |

### Ward County

| | | | |
|---|---|---|---|
| Shipley | 2-Hazlett | Sec-17 Blk-5 | H&TC |

### Winkler County

| | | | |
|---|---|---|---|
| Gulf Prod | 3-Hendricks | Sec-44 Blk-26 | PSL |

# Completions in Texas, Week Ended June 29, 1929

## NORTH CENTRAL & EAST CENTRAL TEXAS

### Anderson County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Humble | 1-State land | | | T.D. 3786 | Dry |

### Brown County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Ownes | 1-Henry | Ingram | Blk-154 | T.D. 1250 | Dry |
| Liebhart | 1-Lewis | Kenney | Blk-624 | T.D. 1715 | Dry |
| Humphreys Bros. | 9-Newton | Mitchell | Blk-141 | T.D. 1188 | Dry |
| De Mont | 6-Newton | Jones | Blk-282 | T.D. 158 | Dry |
| Clark Buffalo | 1-Weeden | Van Winkle | Blk-64 | T.D. 1740 | Dry |
| Caldwell et al | 4-Caldwell | Kerr Co. Sch. Ld. | Sec-15 Blk-277 | T.D. 645 | Dry |
| Buder | 3-Cross | Kenney | Blk-624 | T.D. 1172 | Dry |
| Anderson | 1-Jones | Delgado | Sec-16 Blk-789 | T.D. 1150 | Dry |
| Amer. Maracaibo | 1-Duff | Honeycutt | Blk-623 | T.D. 1185 | Dry |
| Lloyd | 14-Stanley | Smith | Blk-139 | 414-431 | 12 |
| Humble | 19-Armstrong | Delgado | Sec-1 Blk-789 | 1205-1211 | 58 |
| Green Prod | 1-McCulley | Thoma | Blk-53 | 830-832 | 1M |

### Callahan County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Holden et al | 1-Cavanaugh | Comal Co. Sch. Ld. | Sec-98 | 1630-1669 | 100 |
| Bradstreet-Holden | 13-Miller | Comal Co. Sch. Ld. | Sec-98 | 1625-1663 | 140 |
| Texas | 4-Hatchett | D&DA | Sec-23 | 382-393 | 5 |
| West | 1-Able | D&DA | | 404-412 | 5 |
| Dickey et al | 1-Beasley | D&DA | Sec-26 | T.D. 736 | Dry |
| Dickey-Scharbauer | 1-Williams | D&DA | Sec-28 | T.D. 775 | Dry |
| Dickey-Redbanks | 1-Beasley | D&DA | Sec-28 | T.D. 735 | Dry |
| Dickey | 1-Williams | D&DA | Sec-25 | T.D. 722 | Dry |
| Mook Texas-Wakefield | 1-Aiken | Mitchell | | T.D. 1812 | Dry |
| Gibson-Johnson | 6-Snyder | BBB&C | Sec-140 | T.D. 1052 | Dry |
| Cranfill-Reynolds | 1-Harris | BBB&C | Sec-19 | T.D. 1745 | Dry |
| Breeman | 1-Biggerstaff | SP | Sec-310 | T.D. 715 | Dry |
| Barnhart | 2-McFarland | Youngblood | Sec-248 | T.D. 1035 | Dry |
| Ewmo | 1-Jones | D&DA | Sec-40 | T.D. 500 | Dry |
| Woodley | 4-Finley | BOAL | Sec-74 | T.D. 851 | Dry |
| Woodley | 3-Finley | BOAL | Sec-74 | T.D. 380 | Dry |
| Warren et al | 1-Hatchett | D&DA | Sec-19 | T.D. 800 | Dry |
| Texas | 26-Hatchett | D&DA | Sec-24 | T.D. 401 | Dry |

### Coleman County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Vaughn et al | 1-Vaughn | Bond et al | Blk-79 | T.D. 972 | Dry |
| Meredith-Burton-Cameron | 1-Singletary | Nixon | Sec-5 Blk-628 | T.D. 1404 | Dry |
| Cont. et al | 6-Overall | Barkley | Blk-701 | 2180-2182 | 5M |

### Eastland County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| McNeil-Canyon | 1-Turner | H&TC | Sec-30 Blk-2 | 1296-1322 | 40 |
| Owens | 1-Turner Heirs | H&TC | Sec-30 Blk-2 | T.D. 1352 | Dry |
| States | 1-McDonald | H&TC | Sec-7 Blk-1 | T.D. 3291 | Dry |

### Falls County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Killiam-Phillips | 1-Jones | Hampton | | T.D. 2635 | Dry |

### Jack County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Security Drlg | 1-Shanafelt | Hughson | | 3058-3061 | 340&3 M |
| Harper et al | 2-Box | Hughson | | 3095-3110 | 248 |
| Fluty et al | 1-Maxey | SP | Sec-2 | T.D. 1000 | Dry |
| Dorian | 1-Moore | Berryman | | T.D. 650 | Dry |
| Owens et al | 1-Newell | West | | T.D. 2045 | Dry |

### Jones County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| French | 1-Leeson | T&P | Sec-31 Blk-14 | T.D. 1831 | Dry |
| Condor | 1-McDonald | Kirkland | Sec-59 | T.D. 3002 | Dry |
| Phillips | 1-Walters | T&P | Sec-16 Blk-9 | 3863-3865 | 20 |
| Humble | 1-Bickley | T&P | Sec-50 Blk-18 | 2472-2477 | 120 |

### Limestone County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Segal et al | 1-Runnels | Santa | | T.D. 3040 | Dry |

### Palo Pinto County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Wickens | 1-Hart | Ashworth | | 2987-3000 | 1¼M |
| Ash Synd | 1-Hart | T&P | Sec-29 Blk-3 | 3942-3947 | 75&11 M |

### Shackleford County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Roeser-Pendleton | 3-Cook | ET | Sec-88 Blk-58 | 1442-1448 | 58 |
| Humble | 1-Newell | ET | Sec-87 | 1345-1360 | 12 |
| Duel-Earl | 7-Mathews | ET | Sec-32 | 1140-1150 | 110 |
| Cranfill-Reynolds | 1-Moberly | T&P | Sec-48 Blk-11 | 1034-1039 | 24 |
| Midland | 1-Proctor | ET | Sec-166 | T.D. 1495 | Dry |
| Combest | 1-Reynolds | Land & Cattle Co. | Sec-55 | T.D. 1237 | Dry |
| Campbell et al | 1-Reynolds | T&P | Sec-11 Blk-11 | T.D. 1155 | Dry |

### Stephens County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Hanlon | 1-Grimes | TE&L | Sec-3394 | T.D. 4297 | Dry |
| Cranfill-Reynolds | 2-Morris | T&P | Sec-64 Blk-6 | T.D. 2118 | Dry |
| Lone Star | 1-Brooks | T&P | Sec-54 Blk-7 | 3917-3928 | 50&1M |

## NORTH TEXAS

### Archer County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Pet. Prod | 4-Phillips | BBB&C | | 1175-1187 | 40 |
| Gohlke | 5-Wilson | Geraldine | Blk-32 | 1565-1570 | 32 |
| Fain-McGaha | 2-Taylor | ATNCL | Sec-17 Blk-11 | 1475-1480 | 135 |
| Continental | 3-Richardson | McCoy | Blk-10 | 1137-1144 | 65 |
| Prairie | 2-Boyles | FCSL | Sec-22 | 1098-1103 | 30 |
| Prairie | 27-Richardson | SAR | Sec-1 | 1298-1302 | 10 |
| Prairie | 3-Thompson | McCoy | Blk-13 | 1156-1159 | 64 |
| Prairie | 1-McCoy | McCoy | Blk-14 | T.D. 1181 | Dry |
| Young et al | 1-Young | DL&C | | T.D. 1400 | Dry |
| Peacock | 1-Garrett | Walker | | T.D. 800 | Dry |
| Pandem | 3-Wallace | DCSL | Leag. 3 Blk-11 | T.D. 1809 | Dry |
| Long-Texas | 1-Thom | Spillers | | T.D. 2202 | Dry |
| Kruger-Clark | 1-Turbeville | Carson | Sec-170 | T.D. 1550 | Dry |
| Johnston | 1-Garvey | TE&L | Sec-1802 | T.D. 842 | Dry |
| Johnson-Frazier | 1-Graham | Gibenrath | | T.D. 1390 | Dry |

### Cooke County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Thorton-Taubert | 1-Poteet | Stephens | | 1305-1320 | 16 |

### Clay County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Merrick-Belcher | 3-Bates et al. | Parker Co. Sch. Ld. | Blk-6 | 1790-1794 | 15 |
| Mid-Cont. Holding | 2-Stine Bros. | Parker Co. Sch. Ld. | Blk-7 | 265-278 | 4 |
| Mid-Cont. Hold | 1-Stine Bros. | Parker Co. Sch. Ld | Blk-7 | 1724-1747 | 25 |

### Grayson County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Murchison | 2-Wahl | Ingram | | T.D. 1204 | Dry |
| Simpson-Fell | 1-Utizer | Cady | | T.D. 1217 | Dry |

### Wichita County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Panhandle | 6-Burnett | Meade | | T.D. 1600 | Dry |
| Comac Drlg.-Prairie | 1-Bishop | Kennard | | T.D. 1905 | Dry |
| Riner-Bailey | 4-Michie | Netherly | | 1780-1800 | 80 |
| Riner-Bailey | 6-Michie | Netherly | | 1778-1797 | 75 |
| Reno | 2-Roller | Maverick | Blk-8 | 1787-1799 | 50 |
| Heydrick-Stumpf | 4-Boyd | Lewis | Blk-11 | 1781-1797 | 70 |
| Gulf Prod | 5-Mitchell | Lewis | | 1328-1329 | 70 |
| Panhandle | 5-Burnett | Meade | | 1419-1423 | 78 |

### Wilbarger County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Waggoner | J-2-Waggoner | H&TC | Sec-25 Blk-4 | 1886-1888 | 180 |
| Staley-Wynne | S-1-Waggoner | H&TC | Sec-25 Blk-4 | 1892-1903 | 125 |
| Staley-Wynne | G-3-Waggoner | H&TC | Sec-32 Blk-4 | 2287-2294 | 250 |
| Shaw | G-4-Waggoner | MEP&P | Sec-40 | 1854-1877 | 216 |
| Shaw | G-1-Waggoner | MEP&P | Sec-40 | 1854-1876 | 150 |
| Phillips | U-3-Waggoner | H&TC | Sec-44 Blk-4 | 1875-1878 | 51 |
| Phillips | S-3-Waggoner | H&TC | Sec-45 Blk-4 | 2384-2388 | 107 |
| Phillips | 2-Waggoner | H&TC | Sec-18 Blk-4 | 2370-2396 | 125 |
| Knight | A-1-Waggoner | MEP&P | Sec-40 | 1855-1871 | 235 |
| Grayback Dev | 1-Waggoner | H&TC | Sec-50 Blk-2 | 1987-2000 | 25 |
| Fain-McGaha | W-4-Waggoner | H&TC | Sec-32 Blk-4 | 2311-2316 | 200 |
| Empire | B-10-Waggoner | H&TC | Sec-32 Blk-4 | 2326-2332 | 83 |
| Consolidated | C-2-Waggoner | MEP&P | Sec-40 | 1849-1870 | 260 |
| Staley-Wynne | J-1-Waggoner | H&TC | Sec-65 Blk-14 | T.D. 2508 | Dry |
| Warlick-Morgan | 1-Zeiset | H&TC | Sec-19 Blk-13 | T.D. 500 | Dry |
| Fain-McGaha | N-2-Waggoner | H&TC | Sec-17 Blk-4 | T.D. 2475 | Dry |
| Baker et al | H-1-Waggoner | H&TC | Sec-22 Blk-4 | T.D. 1946 | Dry |

### Young County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Stiner-Streeter | 1-Lobban | TE&L | Sec-1667 | T.D. 4370 | Dry |
| Wise-Jackson | 2-Snider | Wilson | | T.D. 650 | Dry |
| Steed-Gans | 1-Snider | Wilson | | T.D. 652 | Dry |
| Ryan et al | 1-Stewart | Tynes | | T.D. 580 | Dry |
| M & V et al | 2-Thomas | TE&L | Sec-155 | T.D. 1035 | Dry |
| Hutchings-Jones | 1-McClure | TE&L | Sec-221 | T.D. 1051 | Dry |
| Bridwell | 1-Prideaux Bros. | CT | | T.D. 736 | Dry |
| Kleiner et al | 28-Langston | TE&L | Sec-1490 | 514-569 | 65 |
| Wise-Jackson | 1-Snider | Wilson | | 612-617 | 16 |
| Texas | 2-Stewart | BBB&C | | 726-741 | 70 |

## PANHANDLE

### Carson County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Texas | 1-Quinn | I&GN | Sec-7 Blk-9 | 3090-3100 | 270 |
| Skelly | 13-Schaeffer | I&GN | Sec-88 Blk-4 | 3098-3100 | 540 |
| Skelly | 14-Schaeffer | I&GN | Sec-68 Blk-4 | 3054-3062 | 472 |
| Sparton | 1-Bednorz | I&GN | Sec-202 Blk-3 | 3320-3393 | 18M |
| Empire | 15-Burnett Est. | I&GN | Sec-4 Blk-5 | 2519-2865 | 5M |

### Gray County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Cockrell-McElroy et al. | 1-McConnell | I&GN | Sec-174 Blk-3 | 3250-3320 | 20 |
| Harwell | 1-McConnell | I&GN | Sec-187 Blk-3 | 3190-3250 | 340 |
| Wilcox | 6-Wilcox et al. | I&GN | Sec-60 Blk-3 | 2973-2975 | 125 |
| Gulf Prod | 7-Bowers | H&GN | Sec-89 Blk-B-2 | 2899-3004 | 920 |
| Texas | 7-Bowers | H&GN | Sec-89 Blk-B-2 | 2926-2940 | 8160 |
| Danciger | 1-Beck | H&GN | Sec-28 Blk-B-2 | 2860-2874 | 2618 |
| Marland | 2-Brown | H&GN | Sec-32 Blk-B-2 | 2856-2863 | 1010 |
| Texas | 5-Saunders | H&GN | Sec-3 | 2870-2875 | 128 |
| Osborne et al | 1-Barrett | I&GN | Sec-111 Blk-3 | T.D. 3275 | Dry |
| Howell Bros | 1-Ferneand | H&GN | Sec-111 Blk-B-2 | T.D. 2250 | Dry |

## WEST TEXAS

### Andrews County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Deep Rock | 1-Harris | PSL | Sec-24 Blk-A-46 | T.D. 4604 | Dry |

### Borden County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Gibson-Johnson | 1-Higginbotham | T&P | Sec-8 Blk-31 | T.D. 3755 | Dry |
| Green | 1-Slaughter | T&P | Sec-32 Blk-31 | T.D. 3314 | Dry |

### Coke County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Cates-Dennis | 1-Mums | T&P | Sec-47 Blk-W | T.D. 2005 | Dry |

### Culberson County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Grisham-Hunter-Deep Rock | 2-Kloh | T&P | Sec-33 Blk-59 | T.D. 1600 | Dry |

### Fisher County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Landreth Prod | 1-Cooper | H&TC | Sec-115 Blk-1 | T.D. 3702 | Dry |
| Cranfill-Reynolds | 1-Fleming | BBB&C | Sec-207 Blk-1 | T.D. 3270 | Dry |
| Cranfill-Reynolds | 2-Willingham | BBB&C | Sec-207 Blk-1 | T.D. 3480 | Dry |
| Dunnigan Bros | 1-Henig | Hibbith | No. 331 | T.D. 3415 | Dry |

### Howard County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Amer. Maracaibo | 5-Settle | T&P | Sec-6 Blk-32 | 2277-2285 | 70 (1 Hr.) |
| Humble | 1-Settle | W&NW | Sec-132 Blk-29 | 2290-2295 | 98 (14 Hrs.) |
| Moody | 12-Roberts | W&NW | Sec-136 Blk-29 | 1394-1424 | 100 |
| Plymouth | 2-Kloh et al. | T&P | Sec-5 Blk-32 | 2290-2300 | 480 (12 Hrs.) |
| Plymouth | 3-Kloh et al. | T&P | Sec-5 Blk-32 | 2194-2200 | 650 |
| Sweeney et al | 3-Chalk | W&NW | Sec-124 Blk-29 | 1705-1720 | 35 |
| Peck et al | 1-Scrivner | T&P | Sec-12 Blk-33 | T.D. 2502 | Dry |

### Irion County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Webb et al | 1-Nutt | Gonzales Co. Sch. Ld. | | T.D. 3511 | Dry |

### Mitchell County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Simms | 1-Elwood | SP | Sec-33 Blk-18 | T.D. 2014 | Dry |
| Adams | 2-Elwood | SP | Sec-15 Blk-18 | T.D. 572 | Dry |

### Nolan County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Habert | 1-Pepper | T&P | Sec-32 Blk-22 | T.D. 3697 | Dry |
| White Eagle | 1-Bigham | T&P | Sec-48 Blk-20 | T.D. 3040 | Dry |

### Pecos County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Trees | 1-Trees | H&GN | Sec-63 Blk-8 | T.D. 2309 | Dry |
| Bell | 1-Gray | GC&SF | Sec-593 | T.D. 1503 | Dry |
| Black et al | 1-Pecos Valley | H&GN | Sec-22 Blk-10 | 1620-1638 | 15 |

### Sterling County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Wilson et al | 1-Elwood | SP | Sec-54 Blk-18 | T.D. 728 | Dry |
| Miller | 1-Foster | T&P | Sec-4 Blk-31 | T.D. 3028 | Dry |

### Sutton County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Southern Crude | 1-Allison | GHSA | Sec-44 Blk-K | T.D. 4970 | Dry |

### Ward County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| J. H. L. Oil Co | 2-Hazlett | H&TC | Sec-17 Blk5 | 2430-2490 | 107 |
| J. H. L. Oil Co | 1-Hazlett | H&TC | Sec-17 Blk-5 | 2453-2545 | 120 |

### Winkler County

| Company | Well Farm | Survey | Sec. & Blk. | Depth | Init. Prod. |
|---|---|---|---|---|---|
| Shell | 1-Daugherty | PSL | Sec-3 Blk-74 | T.D. 3072 | Dry |
| Prairie | 5-Hendricks | | | T.D. 2850 | 60 (1 Hr.) |
| Southern Crude | T89J8-Hendricks | PSL | Sec-9 Blk-B-12 | 2900-2911 | 380 |
| Southern Crude | T8804-Hendricks | PSL | Sec-28 Blk-26 | 2660-2753 | 8000 |

# Oil Field Emulsions

## Chemical and Mechanical Methods Used in Breaking Down Emulsions

*Article Four*

By Lester C. Uren

Professor of Petroleum Engineering, University of California, Berkeley, Calif.

In a previous article of this series, reviewing the technology of petroleum emulsions, the methods of dehydrating crude petroleum emulsions were classified into six groups. These were: (1) gravity settling methods; (2) heat-treatment methods; (3) electrical methods; (4) chemical-treatment methods; (5) centrifugal methods; and (6) filtration methods.

The first three of these methods were discussed and practical results secured with them in field practice were presented. This, the concluding article of the series, will be devoted to a brief discussion of the chemical, centrifugal and filtration methods of demulsification.

### Dehydrating Emulsified Crude Petroleum With the Aid of Chemical Reagents

In discussing the physical properties of petroleum emulsions in the first article of this series, it was shown that emulsions were of two types, one consisting of finely divided particles of oil suspended in water and the other of finely divided particles of water suspended in oil. The phenomenon of certain "emulsifying agents" promoting the formation of one type of emulsion or the other, was also cited.

According to the explanation advanced, this is due to the colloidal tendencies of the emulsifying agent, or its influence on the interfacial tension relationships between the two fluids. As is well known, many chemical reagents soluble in the oil or in the water, have the property of markedly influencing these colloidal tendencies and interfacial tension relationships. For example, sodium, oleate, or sodium soaps of various types, and sulphonates of certain organic acids, when added to a crude petroleum emulsion, have the property of inhibiting the influence of the emulsifying agent and operate to demulsify the oil-water mixture.

Finely divided silica, iron oxide, clay and siliceous and argillaceous materials of various sorts, influence the interfacial tension relationships when added to the oil-water mixture and slowly bring about demulsification. Certain water-soluble salts, such as sodium chloride, which operate to increase the oil-water interfacial tension, have a similar result. Again, it has been shown that the suspended water droplets in crude petroleum emulsions are electrically charged, and that repulsion of like charges may be instrumental in promoting permanence of emulsification.

If this theory is correct, chemical electrolytes having the property of neutralizing the electric charge carried by the water droplets, may be expected to aid in demulsification. For example, if the water droplets are negatively charged, the addition of positively ionized reagents such as sulfuric acid or ferric chloride, would probably assist in promoting demulsification. Again, where a highly dispersible colloidal substance accumulated at the oil-water interface is functioning as the emulsifying agent, it is possible that by adding a flocculating agent, such as sodium chloride, ferrous sulphate or sodium sulphate, a demulsifying effect will be produced.

THESE various physical and chemical effects suggest that recourse might be had to either of a variety of chemical reagents in commercial scale dehydration of crude petroleum emulsions, and a great deal of experimental research has been directed toward this end. More than twenty years ago, W. S. Barnickel interested himself in studying the effects of various chemical reagents on petroleum emulsions. As a result of his work, he secured a number of patents covering the use of various reagents, which have since been commercialized under the name of "Tret-O-lite." During recent years, they have found extensive use in dehydrating crude petroleum emulsions in many fields, notably in the Mid-Continent region.

Several different formulae have been used in the preparation of Tret-O-lite and it has been marketed in

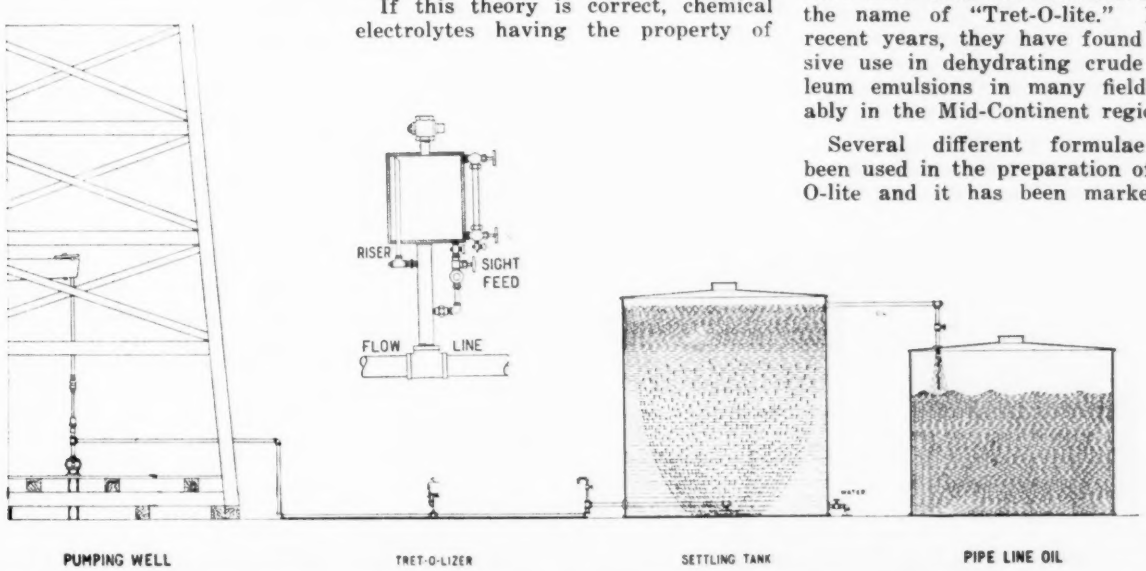



*Fig. 1—Diagrammatic sketch illustrating method and apparatus used in dehydrating oil from a pumping well with the aid of chemical agents. (Courtesy W. S. Barnickel & Co.)*

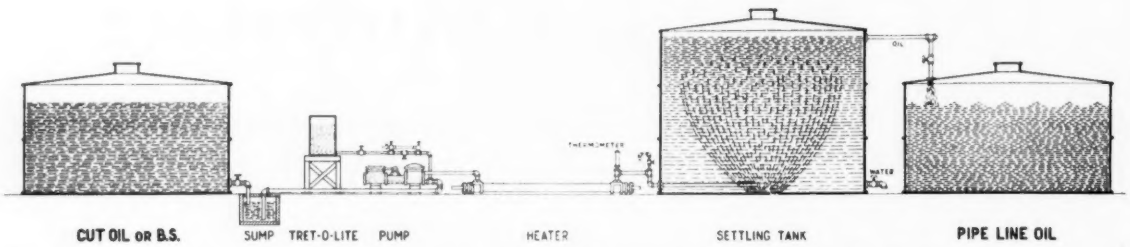



*Fig. 2. Diagrammatic sketch illustrating method and apparatus used in dehydrating tank bottoms with the aid of chemical reagents. (Courtesy W. S. Barnickel & Co.)*

both liquid and solid forms, some varieties being oil-soluble and some water-soluble. One early formula consisted of a mixture of sodium oleate, 83.0 per cent; sodium resinate, 5.5 per cent; sodium silicate, 5 per cent; phenol, 4 per cent; paraffin, 1.5 per cent; and water 1 per cent. This was marketed as a solid, blue-colored salt, intended to be dissolved in water and intimately mixed in small amounts with the petroleum emulsion to be demulsified.

Ordinarily, less than 1 per cent of the reagent is sufficient. Action of the reagent is assisted by moderate heating. More recently, a reagent containing 25 per cent of sulfonated oleic acid in liquid form has been included in the various Tret-O-lite formulae. This reagent is merely diluted with water to form a 2 per cent solution, and added in small amount to the oil to be treated. One variety of Tret-O-lite is also available in oil-soluble form.

TRET-O-LITE is supplied in 50-gallon drums, one drum being sufficient to treat from 5,000 to 15,000 barrels of freshly produced emulsion, or 4,000 barrels of "tank bottoms." The cost of the reagent is about $2 per gallon, plus freight charges from the manufacturers' plant* to the point of use.

*Wm. S. Barnickel & Co., St. Louis, Missouri.

In some cases, petroleum emulsions may be successfully dehydrated with this reagent at normal temperatures, but generally moderate heating—in some cases up to 180 degrees F.—is helpful in increasing the efficiency of demulsification and hastening separation of the two fluids. The amount of reagent and the temperature necessary for best results, varies with the nature of the oil and the emulsifying agent present.

Another chemical reagent that may be used in much the same way as "Tret-O-lite" is called "Vez." This reagent, according to the manufacturers,** is prepared according to some thirty different formulae, the particular one to be used depending upon the characteristics of the oil to be treated. It is an oil-soluble substance, the composition of which is unknown to the writer.

A variety of different methods have been devised for adding chemical reagents of this character to the oil, securing an intimate admixture, applying heat and separating the water from the oil as it settles out. A method commonly used in treating fresh emulsion produced by flowing or pumping wells, involves introducing the liquid reagent in small amounts into the oil as it flows through the lead lines from the wells.

A small tank container connected with the lead line through a tee, and equipped with suitable valve and "sight-feed" control, discharges a small amount of reagent into the flowing oil continuously. (See Figure 1). A small displacement plunger pump actuated by a pumping jack or walking beam, provides a very satisfactory means of accurately measuring a standard volume of reagent and forcing it into the oil lead line at each well.

**The Vez Company, Dallas, Texas.

Turbulent flow conditions in moving through about 1,500 feet of pipe assure a sufficient degree of admixture of the reagent with the oil, and it is simply discharged into a settling tank where separation of the two fluids occurs. Water is drained from the bottom of the settling tank, and oil from the top. (See Figure 1). If heating is necessary, the settling tank is equipped with steam coils and the incoming emulsion enters through a distributing "spider" near the bottom and rises through a layer of hot water.

IN TREATING "tank bottoms," or emulsified oil that has stood some time in storage, the emulsion is forced through a heater and into a settling tank with the aid of a reciprocating pump. A tank of reagent feeds slowly into the pump suction line through suitable pipe connections and valve control. (See Figure 2). A means of introducing the reagent into the oil and securing agitation within the treatment tank, with the aid of a transfer pump, is illustrated in Figure 3. The reagent in this case, is taken with the oil into the pump suction.

Still another method of treatment involves agitating the oil and reagent in the storage tank with the aid of compressed gas or air. The photograph reproduced in Figure 4 shows a temporary field installation for treating "cut oil" in 55,000-barrel tanks. A portable gasoline-engine driven pump, P, is used to draw oil out from the bottom of a tank, discharging it again into the same tank at the top. Chemical reagent is constantly added in controlled amounts at the pump suction from tank T. Locomotive-type boilers, S, furnish

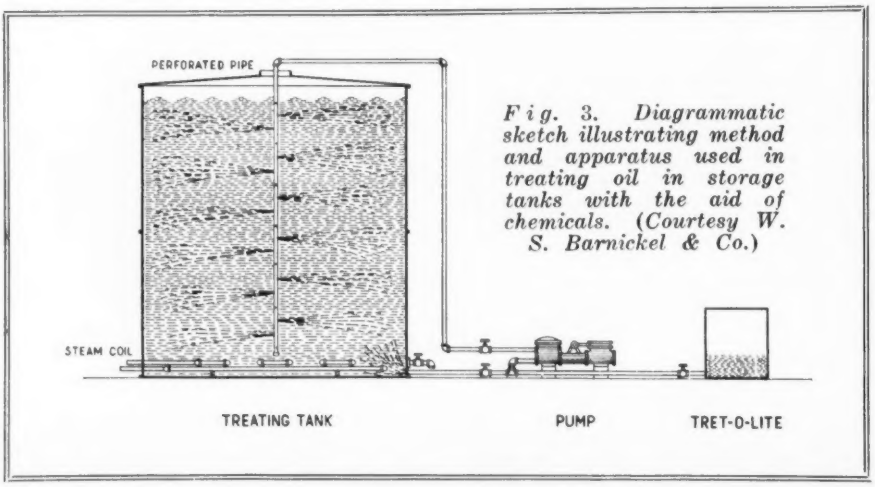
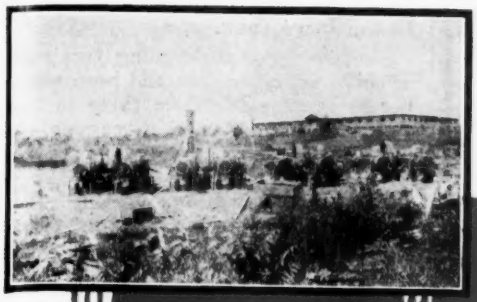
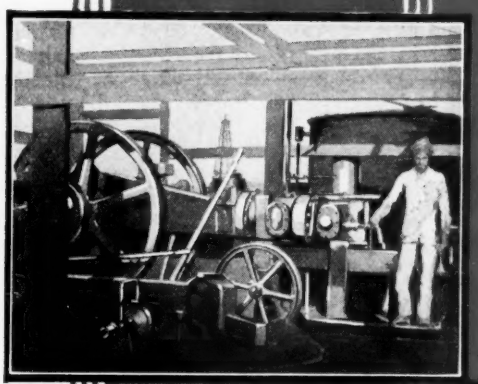



*Fig. 3. Diagrammatic sketch illustrating method and apparatus used in treating oil in storage tanks with the aid of chemicals. (Courtesy W. S. Barnickel & Co.)*





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*and* THE BESSEMER ENGINE COMPANY, Grove City, Pa.

TOP

*A Battery of Bessemer Type Ten Twin Compressors being installed in a South American gasoline plant.*

▲

CENTER

*A line-up of Enclosed Case Bessemer Engines for belt drive compressor work in Venezuela.*

▲

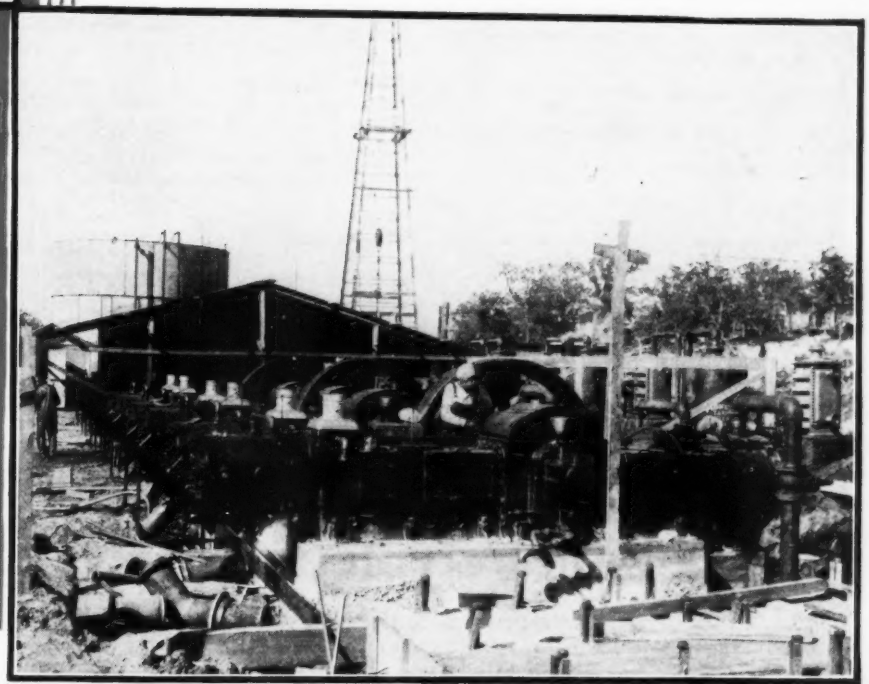
BOTTOM

*An old Bessemer on the job in Khaur, Punjab, India.*

▲

RIGHT

*A typical Bessemer Type Ten installation in our own mid-continent field—where three more Bessemers are being added to those already installed.*



# BESSEMER

# Gas and Air Lift in Oil Production

***In 55 articles since the first of 1928 NATIONAL PETROLEUM NEWS has told of the use of air, gas and water in increasing oil recovery, application methods, and of restoring pressure to old pools.***

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## National Petroleum News

***Main Office: 1213 West Third St.***

**Cleveland, Ohio**


steam heat for heating coils placed in the large tank.

The emulsion undergoing treatment in this particular case had been standing in storage for from three to four years. "Vez" was the reagent employed and about one gallon of the reagent was used for each 100 barrels of emulsified oil. About seven days were occupied in treating 50,000 barrels of emulsion to meet pipe-line requirements.

A method of combining heat treatment with chemical treatment of crude petroleum emulsions, known as the Brady process, makes use of a special type of lubricator, "a", to add the requisite amount of reagent to the oil as it passes through the "cut" oil line "f" and header "c", to a specially equipped boiler, "b". (See Figure 5). Here the oil is heated, heat being applied through the use of hot water about the boiler tubes to avoid over-heating. A thermostatically controlled regulator "g" maintains a constant temperature by regulating the fuel supply. Heated oil and water pass from the boiler through pipe "e" to settling tanks. Gas trap "d", equipped with float-valve mechanism "h", separates any gas or vapor that may be formed in the process of treatment. Such an apparatus is said to have a capacity of about 3,000 barrels per day.[1]

DOW has assembled data showing the cost of dehydrating "cut" oil in various fields by the chemical method.[1] Costs vary widely with the type of emulsion treated and with the amount of reagent and temperature necessary. The reagent cost per barrel of oil recovered is said to range from one to 14-cents; labor cost is small, being estimated at 1.3-cents per barrel of oil in some instances.

Certain operating losses due to evaporation of lighter constituents from the oil as a result of heating, normally occur. This loss is properly chargeable to the process, and where it is necessary to heat the oil to higher-than-normal temperatures it may become an important element of the total cost.

In one case, where oil was treated at 180 degrees F., the evaporation loss amounted to about 7 per cent of the oil, representing a cost of about 7-cents per barrel. Reducing the treatment temperature to 125 degrees F. reduced the evaporation loss of 4 per cent, or 4-cents per barrel.

The chemical cost is greater however, at the lower temperature, so that the total cost remained about the same in each case. Fuel cost in heating is an important item of expense in some cases, but in others is almost negligible. Total costs, according to Dow, range from three

[1]Dow, D. B., "Oil-Field Emulsions," U. S. Bureau of Mines Bull. 250

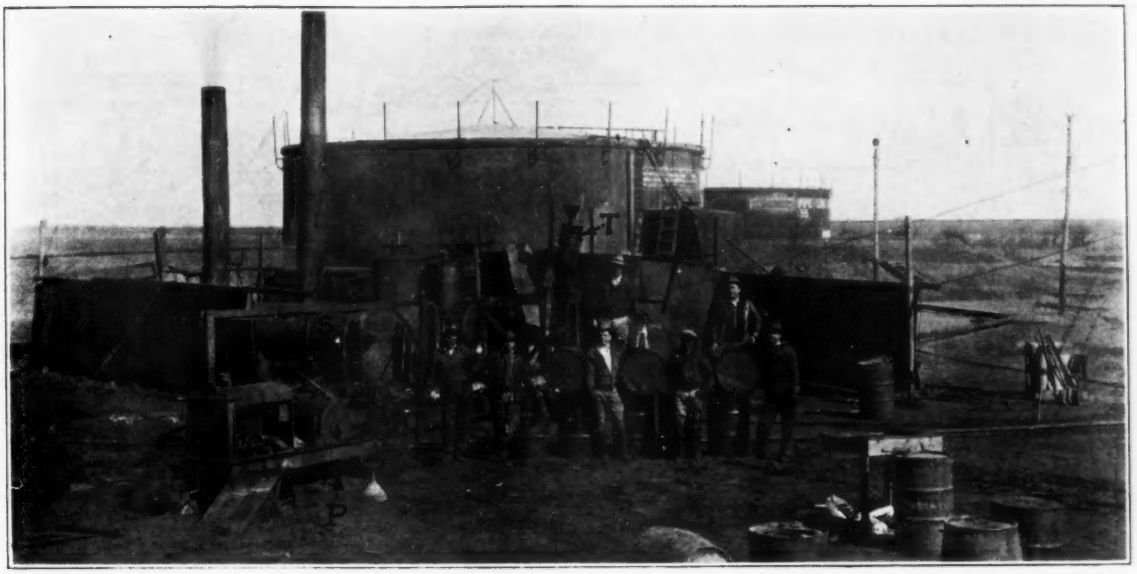


*Fig. 4. Temporary field installation for treatment of tank bottoms by means of heat and chemicals. (Courtesy the Vez Co.)*

to seventeen cents per barrel. The reagent manufacturers state that the chemical cost ranges from ¼-cent to 2½-cents per barrel, depending upon the character of the emulsion.

The chemical method of dehydrating petroleum emulsions has certain advantages that commend it to many oil producers. The installation cost is low and operating costs generally compare favorably with other methods. The process and equipment are simple in character, can be quickly installed, and unskilled labor can usually be employed in its operation.

Moderate treatment temperatures are often sufficient so that evaporation losses are not excessive. The process adapts itself equally well to both large and small-scale operations. The dehydrating facilities on the lease may at all times be proportional to the volume of oil to be treated, so that large plant capacity necessary during the period of flush production does not penalize the producer at a later date when the volume of production has declined. Costs are at all times proportional to the volume of output.

Under favorable conditions, "cut" oil is quickly and effectively demulsified by chemical treatment, and the quality of the oil is not affected. While some types of emulsion are probably more efficiently dehydrated by other methods, the chemical treatment method has a rather wide range of application.

### Centrifugal Dehydration

Centrifugal force developed mechanically by rapid rotation of an oil-water mixture, is effective in bringing about separation of the two fluids. The effect is identical with that of gravity, but is many times as powerful. Centrifuges capable of developing rotational speeds of 15,000 r.p.m. develop a force equivalent to 13,000 times that of gravity.

Separation of the two fluids will be no more effective than is ultimately possible to secure with gravity, but separation will be much more quickly effected. Efficiency in separation of the two fluids is dependent directly upon their relative densities: the greater the difference in specific gravities, the more effective will the separation be.

Two types of centrifuges have been adapted to the treatment of petroleum emulsions, and within recent years have found rather extensive industrial application. These are the Sharples Super Centrifuge and the DeLaval Oil Separator. While their use has been chiefly in extraction of suspended solids in refined and semi-refined petroleum products, they have also found application in the separation of water from crude petroleum.

Dow[1] reports that as early as 1921, a total of about 23,000 barrels of crude petroleum emulsion was being handled daily in fifty-seven centrifuge plants, chiefly in the Mid-Continent field. Centrifuges for this purpose are built in units capable of handling from 5 to 15 barrels of dehydrated oil per hour. They may be either steam or electrically driven.

The Sharples Super Centrifuge is equipped with a long cylindrical rotating bowl, supported within a metal casing on a ball-bearing spindle. The spindle is belt-driven or direct connected to steam-turbine or electric-motor.

The oil-water mixture to be dehydrated enters at the lower end and flows upward through the rapidly revolving bowl, overflowing into two separate discharge covers at the top. During its passage through the bowl, the water, oil and suspended solids are separated into three concentric cylinders, the solids accumulating against the inner wall of the bowl while the water and oil form separate cylindrical layers.

The oil, being of lowest density, occupies the inner portion of the liquid cylinder, next the air space at the center. The discharge openings into the covers are so placed that they separate the two liquids, the oil flowing into the upper cover and the water into the lower. The Sharples centrifuge bowl is powered to revolve at 17,000 r.p.m.

The DeLaval Oil Purifier is designed to operate at about 5,000 revolutions per minute, and is equipped with a comparatively shallow bowl. The inner bowl construction in the De Laval machine is unique in its use of a series of sheet metal cones separated from each other by narrow channels through which the two fluids flow.

Holes in these cones permit of flow from one conical space to the next.

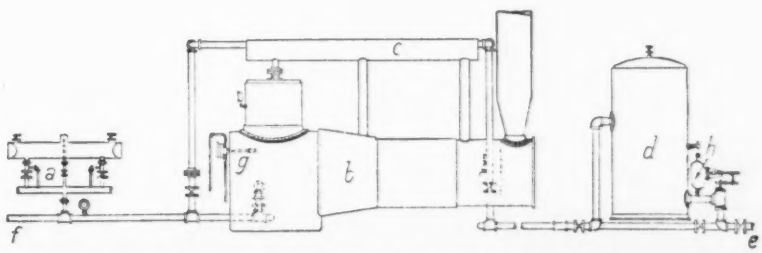



*Fig. 5. Apparatus used in treating cut oil by the Brady process. (After D. B. Dow in U. S. Bureau of Mines Bulletin 250)*

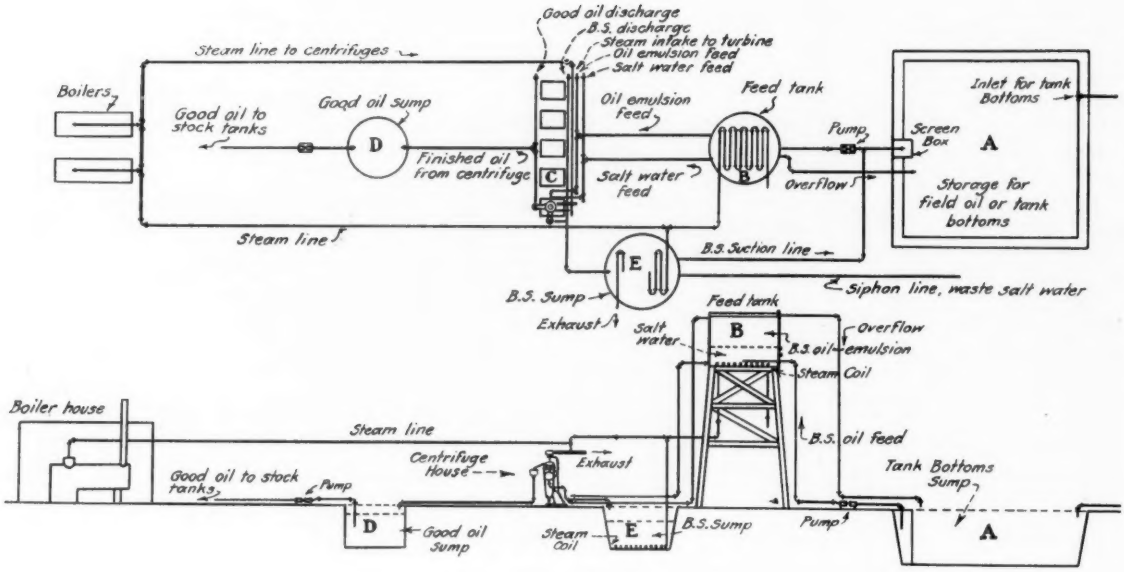



*Fig. 6. Diagrammatic layout for centrifugal dehydration plant. (Courtesy Sharples Specialty Co.)*

The oil-water mixture to be dehydrated is fed into the bowl at the top through a centrally disposed pipe, flows downward and outward, and rises to the discharge ports, disposed concentrically about the inlet pipe.

Centrifugal force is capable of only partially dehydrating the more refractory emulsions. Oil-water mixtures and the less stable emulsions may be completely separated in one operation in a few minutes, but if the fluid contains a more refractory type of emulsion, the water discharged from the machine will carry some emulsified oil with it, particularly if the oil is of low Baume gravity.

Heating the oil before treatment will permit of a more complete separation, but even at high temperatures, in some cases, the emulsion will not be completely resolved. In this event, the emulsion may be separated from the free water for a second treatment, generally after further heat or chemical treatment.

Figure 6 presents a diagrammatic lay-out of a typical plant for centrifugal treatment of crude petroleum emulsions. Emulsified oil to be treated enters the plant at the right and is temporarily stored in sump "A," from which it is pumped as needed to the elevated feed tank, "B."

This tank is equipped with steam coils to permit of heating the emulsion to whatever temperature may be desirable, and is of sufficient height to flow the oil by gravity through a battery of centrifuges. Additional water may at times be advantageously fed with the cut oil to the centrifuges to serve as a carrier for the emulsion, but this is not always necessary.

As a result of this primary treatment, the emulsion and free water are separated from the oil, the clean oil being pumped to storage while the water and emulsion are stored in sump "E" for further treatment. Here the emulsified B.S. is subjected to additional heat treatment, after which it is pumped to a second group of machines for further centrifuging. Such a plant, equipped with fourteen primary units and three secondary units, has a capacity of about 5,000 barrels of oil of 15 per cent "cut" per day. This assumes reasonably light oil—i.e., above 23 degrees B.

The centrifugal method of dehydrating petroleum emulsions has the advantage of rapidity in action: the oil is under treatment only during a very brief space of time; hence, while heat may usually be applied to advantage, the opportunity for evaporation loss is slight. Oils carrying high percentages of water can be successfully handled by this method and the percentage of water quickly reduced from as much as 70 or 80 per cent to as little as 0.5 per cent, without difficulty.

The units are small in size and capacity, so that the plant is flexible in its power requirements and can readily be adapted to changing production requirements by adding or subtracting units. They may readily be transported from lease to lease and placed in service as changing conditions may dictate. Units may be installed and placed in operation in less than 24 hours.

The centrifugal method is handicapped by the presence of suspended solids in the emulsion. Sand, clay, wax and other impurities of this character accumulate in the machines, and if present in excess, operations must be frequently interrupted while the centrifuge bowls are cleaned out.

The frequency of cleaning varies widely. In one plant, the machines had to be stopped for cleaning only once in three weeks; in another case, where the oil carried a high percentage of solid impurity, they had to be cleaned ten times in 24 hours.

The cost of dehydration by this method will compare favorably with that by other methods. Dow[1] states that the cost should not exceed 7 cents per barrel of clean oil produced under average conditions. In one Kansas plant, total costs are but 2.6 cents per barrel. In this case however, the oil was light and easily treated.

In another plant, where high temperatures were necessary and conditions were otherwise adverse, the cost of centrifugal dehydration, including evaporation losses, rose to 25 cents per barrel. Cases have also been reported, in which salt water in the oil caused rapid corrosion of the centrifuge bowls and covers and other exposed parts, occasioning high maintenance expense, but this is unusual.

**Dehydration by Filtration Methods**

Many efforts have been made to develop processes designed to separate emulsified oil and water by filtration under pressure through various porous media, and a number of patents have been issued covering processes of this character. Cottrell's original patents, covering the electrical process of dehydration, specified the use of a "wetted septum" or water-wet canvas bag through which the emulsion was forced.

The oil passes through such a water-wet filtering medium, and if the pore spaces of the filter are sufficiently small, the emulsion will be "broken" and the water left on the filter. Excelsior, sand, diatomaceous earth and other filtering media have been used with more or less success, often with the aid of the familiar filter press so widely used in wax filtration in oil refining, and for like purposes in other industries.

In one California plant where a thin layer of diatomaceous earth on filter cloth was used as the filtering

medium, with a standard type of filter press, 1,300 barrels of dehydrated oil were produced daily at a total cost of only 2½ cents per barrel. The filter bed was effective for more than six months without changing the diatomaceous earth, in this plant.

While the filtration methods apparently offer promise of reasonable success—at least with certain types of emulsion—they are used only to a very limited extent. Most of them can scarcely be regarded as in anything more than an experimental stage of development. From the standpoint of volume of oil treated, they certainly cannot as yet be considered as commercial competitors of the electrical, chemical, centrifugal and heat-treatment methods previously described. They are therefore given but brief space in this review.

### Summary and Conclusions

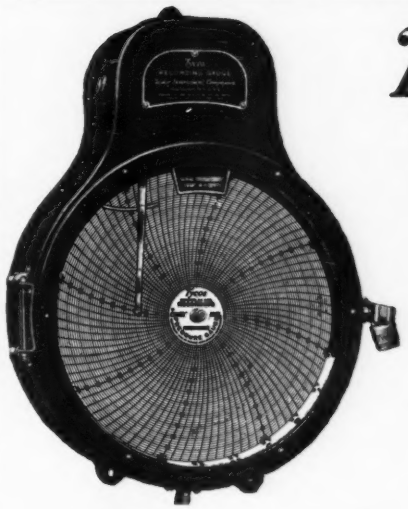
This is the concluding article of a series of four reviewing the technology of oil-field emulsions. The first was descriptive of the physical properties of crude petroleum emulsions and outlined the various theories that have been offered in explanation of their formation and permanence. The second discussed the economic aspects of the oil-field emulsion problem and explained how in the practical operation of producing wells, their formation might to some extent be avoided.

The third and this, the fourth and concluding articles of the series have been devoted to brief descriptions of the processes and equipment employed in the several methods of demulsification that have found application under field conditions. The advantages and disadvantages of each of the six methods of dehydration have been discussed briefly.

In the last analysis, the selection of the best method for a particular type of oil, must be based on a careful engineering study of the conditions presented, giving special attention to the physical characteristics of the oil, the amount of water and other impurities present, and the extent to which it is emulsified. The relative costs by each of the possible methods must also be estimated.

Operators in different regions have shown a tendency to follow precedent and to respond to "sales pressure" by representatives of different equipment or materials manufacturers. Producers in California seem to prefer one method, those in the Mid-Continent and Gulf Coast regions, others.

Comparatively few have given the whole subject of emulsion formation and dehydration the attention it deserves. It seems probable that on many oil-producing properties, a thorough-going study of the mechanical causes of emulsification and of possible economies in dehydration, would result in substantial reductions in the cost of producing marketable oil.

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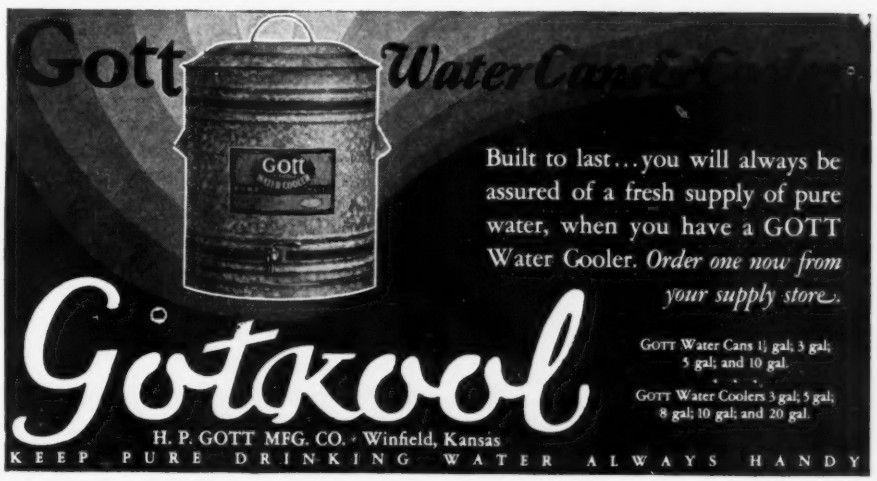
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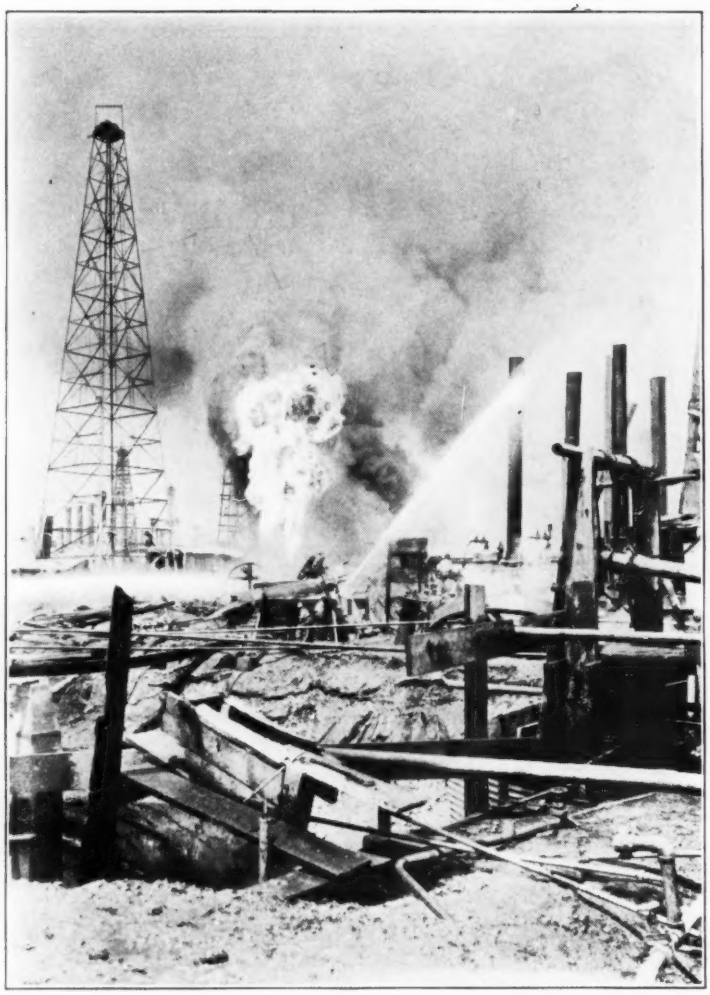

*Close-up view of fire showing fire fighters working behind shields*

# Movie Wind Machines Aid Santa Fe Springs Fire Fighters

LOS ANGELES, June 27

SANTA FE SPRINGS was the scene of another destructive fire recently. All except one of the burning wells have been brought under control.

The fire originated in the center of the thickly drilled area just southeast of "The Four Corners" when a 1500 barrel storage tank being erected by Wilshire Oil Co. collapsed under excessive pressure.

One version of the cause and the one most generally accepted is that oil from the McAdams Rhode well No. 1 was allowed to flow directly into the storage tank while the by-pass sand trap was being cleaned. As a result the full pressure of the well, which must have been nearly 500 pounds, was exerted against the tank top.

Field engineers say that an excess of 40 or 50 pounds is sufficient to bulge the floating cover. Oil and gas from the tank sprayed on an adjoining boiler and soon burst into flame, causing the destruction of seven derricks before volunteer fire fighters were able to bring it under control.

Of the seven rigs destroyed, two—McAdams-Rhode No. 1 and York-Lockhart No. 2—were over heavy producing wells that had a daily average of 7000 and 6000 barrels respectively. These two wells proved to be the stumbling block in the path of fire fighters, throwing up great clouds of smoke and sheets of flame that prevented an approach of nearer than 100 to 150 feet.

A unique method was introduced in stopping the fire in the Rhode well, one that may prove to be the most successful yet used. Wind machines, used to create windstorms and cyclones on the moving picture sets, were installed on the windward side of the fire.

Fire fighters incased in heavy asbestos suits and protected by shields moved these machines toward the fire. The heavy draft created, blew the flames away from the mouth of the tubing and thereby allowed workers to approach and divert the escaping oil through an underground pipe, by opening a valve on the Xmas tree.

The York-Lockhart well continued to burn for some time through a leak in the packing around the tubing. Reports are that this well is equipped with an old fashioned head that has a rubber packing around tubing. This rubber was soon destroyed by the heat and allowed the oil to escape.

It has been estimated that the damage to rigs and machinery will not exceed $75,000, but that losses incurred through the burning of the oil from the wells and in storage tanks will run into millions of dollars.

In addition to the two flowing wells, U. S. Royalties-Turner No. 4, Woodward and Bull No. 1, and Graham & Loftus No. 2, old pumping wells from the shallow zones, and two drilling wells General Petroleum Corp. No. 187 B and Wilshire Oil Co.'s Peterson 1-A suffered loss of derricks and surface equipment.

## Practical Field Topics On Fall Program

HOUSTON, June 28.—Practical oil field operating subjects are on the fall program of the Texas-Louisiana-Arkansas district of the American Petroleum Institute division of devolpment and production engineering. The meeting is to be held at the Galvez Hotel, Galveston, Texas, Sept. 5 and 6.

Standardization of electric power rate structures for drilling and production; centrifugal versus reciprocating pumps for gathering oil; metallurgy of drilling tools, are scheduled for the morning session of the 5th.

Weighing and counterbalancing wells; proper care of sucker rods; methods of waste water disposal, are on the afternoon program.

The following morning the discussion of the penalty of drilling crooked holes, which started at the spring meeting of this district, is to be continued and methods for drilling vertical holes are to be taken up.

The committee in charge asks that suggestions on the present tentative program be made either to A. S. Feild, chairman of the Texas-Louisiana-Arkansas district, Shell Petroleum Corp., Dallas, or to E. V. Foran, chairman of the district program committee, Saxet Oil Co., Houston, Texas.

*Flyer's view of the refinery of the Texas Pacific Coal & Oil Co., at Fort Worth. Note the markings for aviators on the three tanks at the left. On the one in the foreground is a compass, on the middle one an ad for the company's aviation oils and on the one in the left background is an arrow pointing to the nearest airport*

# Refinery Research Laboratory Tied To Practical Plant Operation

By Paul Truesdell
N. P. N. STAFF WRITER

Article 1

FORT WORTH

PRACTICAL bread and butter development work and pure scientific research are hooked together in a rather unusual degree in the mechanical and chemical laboratories which are features of the refinery of the Texas Pacific Coal & Oil Co. here.

Research work is not allowed to soar beyond the possibilities of profit-making but neither is it held down to mere routine operations. It is found at this plant that what is today a pure research project tomorrow may show up as a new product or a new money-saving method of operating some department of this plant.

The laboratories of this 3000-barrel a day refinery are such, in extent, in equipment and in personnel, that many a larger refinery need not blush to own them. Six graduate chemical and mechanical engineers are employed. Among the equipment in the chemical and mechanical laboratory are experimental stills with fractioning towers of various types; a 3-ton refrigerating plant and a 6-cylinder Continental motor connected to a hydraulic dynamometer.

An airplane engine is now being rigged up for testing purposes. A 100-hour "breakdown" machine designed by company engineers for testing their own and competitive oils; fluidity machines for testing fluidity of oils at low temperatures; consistometers to determine their behavior at high temperatures and a grease testing machine are included in the laboratory equipment.

As rapidily as possible, results of the work in the laboratories and the facts discovered are translated directly into refinery operations, either in the way of making special products or improving the quality of the standard products already being made.

Up to date, the research and development work has resulted in a profitable line of specialties. These include valve spring and rocker arm lubricants for aviation engines; penetrating oil; floor oil; furniture polish; insecticides; and Greasof, a cleaning fluid for removing spots from clothes.

Dr. E. R. Lederer, vice-president of the company in charge of the refining operations, is the guiding spirit of the refinery. F. R. Staley, formerly of the Atlantic Refining Co., is the chief chemist. Robert Beatty is chief engineer and George Pfau is superintendent of the plant.

The capacity of the plant is rated at 3000 barrels a day. The raw material is Ranger paraffin base crude exclusively. It is produced on the company's own leases and brought to the plant by the company's pipe line about 120 miles long.

The refinery consists essentially of a crude distillation department, a cracking plant, a complete lubricating oil manufacturing department including light and heavy oil treating facilities, a contact filtering plant and centrifuge, and a grease plant. The filtering department includes clay-grinding, treating and pulping equipment.

The grease plant includes compounding facilities for making various blends of oils, and a department for cleaning, sandblasting and painting steel barrels. The plant can turn out 100,000 pounds of grease each month, it is stated.

THE company markets Ethyl gasoline and a mixing plant for treating gasoline with Ethyl fluid is a part of the refinery.

The major products are gasoline, kerosene, finished motor oils, bright stocks, neutrals and greases.

The featured product is a motor oil designed particularly for lubrication of aircraft engines and automobile engines that are subjected to severe conditions of service. This oil is claimed to maintain a very high

viscosity under the heat found in the operation of a hard-driven high compression automobile, and the ability to flow at low temperatures under the conditions prevailing in a cold engine on a winter morning.

At present the refinery is turning out about 25,000 gallons a day of lubricating oil. Installations are now being made that will increase this capacity to about 30,000 gallons a day and it is expected that the output will be further increased within the next few months.

All the gasoline produced at the plant is sold through the company's own retail outlets. The oils are sold in tank cars and steel barrels. The special lubricating oil referred to, which is put out under the trade name of T. P. Aero Motor Lubricating Oil, is made in four grades and is marketed altogether in steel barrels.

All distilling operations at the plant are carried on in shell stills. Until recently the entire primary distillation equipment and rerun equipment as well has consisted of a battery of nine shell stills. Now a pipe still with a bubble tower is nearing completion, for rerunning the dewaxed lubricating oil to recover the diluent naphtha and reduce the oil to the proper viscosity.

In distilling an oil from which lubricants are to be made, it is, of course, very important to avoid burning or overheating the oil at any stage of the operations. To avoid this possibility and make close temperature control possible at the Texas Pacific plant, all the shell stills are equipped with Alcorn carborundum muffle furnaces. These heat the oil by radiation and prevent direct impingement of flame on the fire sheets of the stills.

Dr. Lederer says the carborundum furnaces, which have been in operation for more than two years, are very satisfactory as an aid to temperature control and fuel economy.

OF THE battery of nine stills, five were run as crude stills and four as rerun stills to recover the naphtha from the diluted oil after chilling and centrifuging. One of the rerun stills has been torn out to make room for the pipe still unit that is under construction, so eight stills are now carrying the entire load of distilling and rerunning, pending completion of the pipe still.

When that is done it is expected to replace the four rerun stills. Later it is planned to put in another pipe still unit to replace the five crude stills, thereby putting the entire load of the plant on two stills instead of nine.

The long residuum system of distillation is used at the Texas Pacific plant. Each of the five crude stills is equipped with a Badger bubble tower. The crude on its way to the still battery passes through a heat exchanger picking up heat from the long residuum being pumped out of the last still in the battery. Thus preheated, the crude enters No. 1 still at about 200 to 275 degrees F.

As the plant is now running, aviation gasoline of about 60-64 A.P.I. gravity is taken off the top of No. 1 tower. Off the top of No. 2 tower is taken a stream of 58-60 U. S. Motor, off No. 3 tower a 50-52 naphtha stream, off No. 4 tower a kerosene stream and off No. 5 tower a gas oil cut to serve as cracking stock. The heavy ends from each tower reflux into the appropriate still. The bottoms are steam lifted from still to still.

The bottoms from Still 5 in the battery (long residuum) are continuously pumped off to serve as the basis of the lubricating oils.

The yield of gasoline is given as about 35 per cent, kerosene, 14 per cent, gas oil, 19 per cent, loss 2 per cent, leaving about 30 per cent of long residuum, all these figures being based on the crude. The handling of the long residuum to make finished motor oils will be described in Article 2.

The gas oil from the crude distillation is cracked in a Cross cracking unit of 700 barrels daily charging capacity, equipped with hot oil pumps. The Cross unit is oil and gas fired into six Alcorn carborundum furnaces. It has the conventional Cross reaction chamber, evaporator and bubble tower and operates under about 750 pounds pressure.

The hot oil and vapors pass from the furnace coils into the reaction chamber, thence into the evaporator. The bottoms are continuously drawn off from the bottom of the evaporator as fuel oil. It has a gravity of 10 to 12 A.P.I., zero cold test and less than one per cent b.s. It is sold to the railroads.

The vapors pass from the evaporator into the bubble tower. Gasoline vapors go overhead and a recycle gas oil stream is taken off one of the intermediate plates of the tower. The gasoline vapors pass through two Gray vapor phase treating towers and are condensed into finished gasoline.

The recycle stock goes from the tower into an accumulator tank which is heavily insulated, and fresh virgin gas oil also is pumped into the accumulator tank. The hot recycle stock heats up the fresh oil. A hot oil pump takes suction in the accumulator tank, feeding the oil into the cracking coils at about 600 F. The cracking unit is making 30-day runs and is shut down only 14 to 20 hours for cleaning. Very little coke is formed in the operation. The yield is about 65 per cent gasoline on the gas oil charged.

The cracked gasoline is mixed off with the straight run gasoline to make a 58-60 U. S. Motor fuel, except that enough of the cracked fuel is kept out to make Ethyl gasoline. Only the straight cracked gasoline is treated with Ethyl at this refinery.

The refinery has a plentiful supply of water from its own wells of which there are several. All but one are flowed by compressed air. That one is equipped with a Layne-Bowler turbine type deep well pump. Water is delivered from the wells to the plant at a cost of 5 cents per 1000 gallons, it is estimated.

The very hot weather prevailing in the summer makes artificial cooling of the water necessary. The plant has a big Braun cooling tower with a capacity for cooling 3000 gallons a minute from 92 to 78 F. There is an auxiliary tower with a capacity of 400 gallons a minute for further reducing the temperature of the water used in the refrigerating plant.

ONE of the best small investments the company ever made, according to Dr. Lederer, was for a Braun absorption plant for recovery of gasoline from the uncondensed still gases. This is connected to the running lines from the stills, the Cross cracking unit and the crude oil and gasoline storage tanks.

The cost of the gasoline recovery plant is estimated at about $12,000 altogether. Since it was put in operation it is stated that the plant has produced about 40 barrels a day of natural gasoline and has earned an average of $1800 a month. Right now a small cooling tower designed by company engineers is being added to the plant. This is expected to cool the enriched oil approximately 5 degrees F. and add about 5 per cent to the gasoline yield of the plant.

Notwithstanding that this comparatively small refinery has a boiler plant consisting of six units developing approximately 1500 horsepower, most of the pumps and other equipment are driven by individual motors, the electric power being purchased. About 150 motors are used in this 3000-barrel refinery.

An unusual amount of steam is needed for process work at this plant, not only for use in the stills but also for cooking the clay which is used in contact filtering of the oil. These operations will be described in Article 2.

*(To be concluded)*

## New Equipment

**A. O. Smith Corp., Milwaukee,** manufacturer of oil field equipment, has off the press bulletin 505 entitled "The New Way" which describes Smithwelding, its process for electric arc welding of gas and oil line pipe. The company claims that, since 18 months ago when it first announced its welded pipe for oil and gas fields, it has shipped 2500 miles of this pipe, and says that more than

800 oil cracking stills and other pressure vessels have been produced by this welding process.

The strength and ductility of welded pipe is due to the longitudinal seam on the pipe which equals or exceeds the strength of the skelp itself, the bulletin says. The accuracy, uniformity and lighter weight of welded pipe make for faster laying in the field, the 30 or 40-foot lengths meaning fewer joints and less handling, uniform roundness and straightness making stabbing and joining faster and surer.

Several pages of engineering data are included, showing tables of wall thicknesses of welded pipe, test pressures and weights, results of field bending tests, and application of expansion joints.

* * *

**Consolidated Ashcroft Hancock Co.,** Inc., New York, will move its general sales offices from New York to Bridgeport, Conn., July 1.

G. A. Binz has been made assistant to the vice president in direct charge of industrial sales research. W. P. Bradbury is general sales manager, and N. B. Carlton has been appointed western sales manager with headquarters at Chicago.

* * *

**A paper presented before one of** the sectional meetings of the American Society of Mechanical Engineers on "The Occurrence and Elimination of Surge or Oscillating Pressures in Discharge Lines from Reciprocating Pumps" has been republished in reprint form by Gould Pumps, Inc., of Seneca Falls, New York, and copies are available to those interested. Authors of the paper were H. Diederichs, professor of experimental engineering and director of Sibley School of Mechanical Engineering, Cornell University, and W. D. Pomeroy, general manager of Gould Pumps.

* * *

**Oil Well Supply Co., Pittsburgh, Pa.,** has built a portable shop for use in installing Nicholson thermic syphons in boilers in the oil field. The shop consists of a complete welding outfit both electric and acetylene, and an air compressor for the operation of air driven tools.

This thermic syphon has as its chief advantages increased fire box heating surface, increased circulation, increased steaming capacity, increased general efficiency, reduced fuel consumption and maintenance costs, the company claims.

* * *

**Continental Can Co., Inc., 100 East** 42nd St., New York, recently offered 50,000 shares of common stock to its employes at $60 per share, which offering has been heavily oversubscribed, according to the company. Nearly 4000 employes subscribed for 120,430 shares, more than twice the amount offered.

# New Patents

Prepared by R. E. Burnham, patent and trade-mark attorney, Continental Trust Building, Washington, D. C., from whom copies may be obtained at the rate of 20c each. State number of patent and name of inventor when ordering.

## June 11, 1929

### REFINING

**Apparatus for the treatment of mineral oils**—William F. Downs, Chatham, N. J. Filed Nov. 24, 1922. No. 1,716,372.

**Submerged combustion process**—Carleton Ellis, Montclair, N. J., assignor to Ellis-Foster Co. Filed Mar. 17, 1925. No. 1,716,433.

**Art of sweetening hydrocarbon oils**—Max G. Paulus, Casper, Wyo., assignor to Standard Oil Co. of Indiana. Filed July 20, 1926. No. 1,716,973.

**Art of refining hydrocarbon oil**—Elmer H. Payne, Wood River, Ill., assignor to Standard Oil Co. of Indiana. Filed June 17, 1925. No. 1,716,974.

**Process and apparatus for the vacuum distillation of hydrocarbons**—John C. Black, Destrehan, La. Filed Feb. 2, 1924. No. 1,717,002.

**Process for converting petroleum oils**—Walter M. Cross, Kansas City, Mo., assignor to Gasoline Products Co., Wilmington, Del. No. 1,717,007.

**Method and apparatus for rectifying lubricating oil**—Martin Czarny, Roselle, and Frank C. Frolander, Elizabeth, N. J. Filed July 6, 1927. No. 1,717,096.

### PRODUCTION

**Well-derrick device**—Thomas A. Myers, Ventura, Cal. Filed Jan. 11, 1928. No. 1,716,559.

**Well-pump**—Wilson T. Smith, Los Angeles, Cal. Filed May 4, 1925. No. 1,716,709.

**Well-drilling tool**—Michael Schwafel, Taft, Cal. Filed Nov. 13, 1928. No. 1,716,741.

**Pumping-jack frame**—Edgar E. Greve, Bellevue, Pa. Filed Feb. 24, 1925. No. 1,716,817.

**Apparatus for heating vapors between compressors and wells**—Lemuel J. Husted, Los Angeles, Cal., assignor to Oil Well Rejuvenating Corporation. Filed Sept. 13, 1926. No. 1,716,854.

**Well-elevator**—John Grant, Los Angeles, Cal., assignor to Byron Jackson Pump Co., West Berkeley, Cal. Filed Apr. 13, 1922. No. 1,716,885.

**Deep-well elevator**—John Grant, Los Angeles, Cal., assignor to Byron Jackson Pump Co., West Berkeley, Cal. Filed Apr. 13, 1922. No. 1,716,886.

**Mud-pump valve**—Erwin E. Miller, Fullerton, Cal. Filed Oct. 16, 1925. No. 1,716,896

**Mud-pump piston**—Albert Z. Rash, Hollywood, Cal. Filed Mar. 14, 1928. No. 1,716,900.

**Well apparatus**—Nelson K. Smith, Los Angeles, Cal., assignor to Byron Jackson Pump Co., West Berkeley, Cal. Filed July 25, 1925. No. 1,716,905.

**Hoist**—Nelson K. Smith, Los Angeles, Cal., assignor to Byron Jackson Pump Co., West Berkeley, Cal. Filed July 25, 1925. No. 1,716,906.

**Well-cementing method and means**—Walter A. Loomis, Long Beach, Cal. Filed Mar. 6, 1928. No. 1,716,925.

**Stuffing-box**—Benjamin P. Hoffman, Tulsa, Okla., assignor to Pierce Development Co., same place. Filed Dec. 20, 1926. No. 1,716,961.

**Sucker-rod coupling**—Benjamin F. Cargle, Rosston, Ark. Filed Jan. 17, 1927. No. 1,717,186.

**Well-drilling apparatus**—Richard P. Simmons, New York, N. Y. Filed May 29, 1928. No. 1,717,271.

**Well-finishing tool**—Vio A. Asplund, Minot, N. Dak. Filed Jan. 17, 1928. No. 1,717,300.

### MISCELLANEOUS

**Floating deck, gas-tight type**—Alvah M. Griffin, Los Angeles, Cal., assignor to Consolidated Steel Corporation, same place. Filed July 13, 1927. No. 1,716,491.

**Liquid-dispensing apparatus**—Earl E. Eickmeyer, Dayton, Ohio, assignor to Dayton Pump & Mfg. Co., same place. Filed Feb. 20, 1928. No. 1,716,541.

**Automatic vent for breather-roofs**—Clayton L. Day, Chicago, Ill., assignor to Chicago Bridge & Iron Co. Filed Dec. 3, 1927. No. 1,716,950.

**Liquid-dispensing apparatus**—Earl E. Eickmeyer, Dayton, Ohio, assignor to National Recording Pump Co., same place. Filed Oct. 19, 1925. No. 1,717,101.


**The EDELEANU Process**

*for*

**Refining with Liquid $SO_2$**

**NO loss of distillate**

**NO production sludge acid**

**NO plant corrosion**

**NO loss of $SO_2$**

***Yielding***

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**KEROSENE**
**TRANSFORMER OIL**
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**New York N. Y.**

# Visiting Around the Refineries

By Paul Truesdell

National Petroleum News

WE HOPE the United States Supreme Court will speed as much as possible the hearing and final decision of the appeal of the four company members of the Patent Club from the ruling of the circuit court in Chicago in the suit brought against them by the United States government in the cracking patent case.*

Questions raised in the opinion handed down by the trial court may well cause a feeling of uncertainty in the refining industry until they are settled by the mandate of the highest court. They may affect particularly the advance of vapor phase cracking by the Gyro or the De Florez processes. These two processes are the latest to be taken into the licensing arrangement of the Patent Club.

In view of the circuit court's opinion, we wonder how far two or more companies can lawfully go in making joint agreements on patent rights, scope of operations, royalties and so on. If the district court is sustained, they certainly cannot extend their agreements to restrict in any way the marketing of the products produced.

Another serious question brought up by the opinion is, if several companies each own a patent, not basic but covering some phase of cracking, how far may they go in joining or pooling their several patents with the effect that development of the art is thus closed from every direction?

The opinion states in effect, that gasoline is gasoline, whether produced by cracking or straight distillation and is not a patentable product. If this reasoning is upheld in the case of all motor fuels, some of the patents relied upon in the vapor phase field may be worthless.

It will be interesting to see whether the statement of the trial court to the effect that each of the companies represented in the Patent Club could carry out the processes covered by their respective patents without infringing the patents of the others, is upheld by the supreme court.

Belief that they could not carry out their respective processes without infringing each other's rights is claimed to have been the reason for the original agreement between the Standard of Indiana and The Texas Co. on cracking patents which was the origin of the Patent Club.

* * *

IT APPEARS that little harm will be done to the oil industry by reason of the changes made in the specifications for U. S. Motor gasoline. Most of the refiners seem to feel that the specifications are fair enough, although there is likely to be some minor trouble over the optional variation of the 10 per cent point limits.

The government technologists and the members of the Federal Specifications Board have shown a desire to be fair and have compromised with the refinery technologists on every point where the latter showed hardship would be caused by adherence to the changes originally proposed.

It is unfortunate that the government felt impelled to establish a new grade of gasoline for use in fire engines, ambulances and so forth. This special gasoline is proposed for use in equipment requiring such small quantities that it would seem better to send out a boy with a 5-gallon can for a batch when wanted than to set up a new specification that may cause trouble through adoption by states as their irreducible minimum of gasoline quality.

However, in this case too, the Federal Specifications Board has done its best to make plain that this special grade is for special uses only and should not be regarded as a standard commercial grade.

* * *

THE expenditure of about $9000 a year, the oil industry and the automobile industry each paying half, has brought remarkable results in the cooperative fuel research program that has been carried on by the Bureau of Standards during the past 10 years.

What these results are was stated pointedly by Dr. H. C. Dickinson, chief of the fuel and power division of the Bureau, who has headed up the work, in a paper presented before the Society of Automotive Engineers at the Saranac Lake meeting, June 25-28. Dr. Dickinson said:

"I desire to emphasize the fact that the fuel research project on which the two industries have spent about $4500 a year each, has brought the engineering staffs of the two industries into accord; has contributed largely to fuel saving for the country; has afforded all the technical data needed to combat crankcase dilution, which data has been well utilized; has afforded complete data on the relationship of fuels to engine starting which have not yet been fully utilized; has cleared up the question of the effect of fuel on engine acceleration and is now concerned with securing a satisfactory technical control over the relationship between fuels and engine compression ratios."

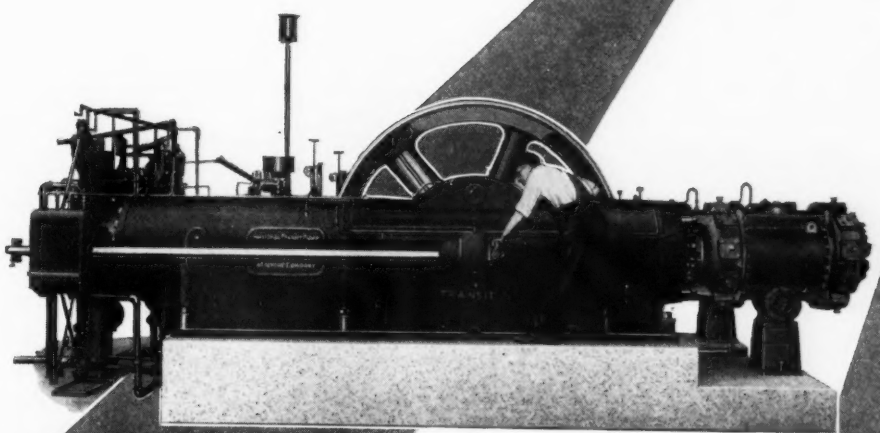
* * *

DESPITE improvements that have been made in cracking process design and operation, the Burton process on Jan. 1, 1929, was still fourth in capacity of units in service in the refineries of the country, according to a survey of cracking plants made by the Bureau of Mines.

Cross and Holmes-Manley were tied for first place with 232,000 barrels daily capacity, having 160 and 154 units respectively in service. Dubbs was second with 186 units and 214,000 barrels a day capacity. Tube and Tank was third with 124 units and 210,000 barrels capacity. Burton was fourth with 1060 units and 192,000 barrels a day.

*National Petroleum News, June 19 issue, Page 27.

# STRONG AS THE HILLS
# Quiet as the Valleys



-170 H.P.- SINGLE ACTING TWIN-

# TRANSIT

17x24" GAS ENGINE COMPRESSOR

NATIONAL TRANSIT
PUMP & MACHINE CO.

OIL CITY, PENN'A.

—*Photo Courtesy Power Boating*

*The start of an outboard race in Lake Erie. The crafts can make about 40 miles an hour*

# Motor Boats to Provide New Market For Straight Natural Gasoline

TULSA

A NEW market for thoroughly rectified straight natural gasoline has been discovered by the Naturaline Co. of America, subsidiary of the Chestnut & Smith Corp.

The market is that created by the fast growing fleet of boats powered by gasoline engines used by sportsmen on the rivers, lakes and along the coast.

Unblended natural gasoline which has been rectified to about the specifications of the natural gasoline used in airplanes has been tested out under varied conditions by the Naturaline Co.

As a result of this research work the company has begun an advertising campaign to motor boat operators in the special magazines such as Motor Boating.

Last year Fred L. Foster, Naturaline salesman, took a supply of that gasoline to Miami, Fla., at the time of a race between outboard motor boats. In the race were two sea-sleds of the snub-nosed type which appeared to be outclassed as far as speed was concerned by a number of special racing boats, also powered by outboard motors.

The race was to be run in three heats. In the first two heats the sea-sleds failed to place among the leaders. Before the third heat their gasoline supply was depleted and Naturaline was supplied to their tanks. In this last heat the sea-sleds ran away from the special racing boats and won the race.

Tests made by the Naturaline Co. have indicated an increase of 300 to 500 R.P.M. by using the rectified natural gasoline over the engine speed formerly obtained. New speed records have been obtained by some boats equipped with double motors and built especially for racing.

The high speeds were obtained without frost in the carburetors which had troubled some operators who had been using benzol blends.

The outboard type of motor is notorious as a hard engine to start. This is because the motor does not have a force feed method of lubrication and operators must mix motor oil with the gasoline in order to obtain good results. The average mixture is 1 quart of oil to a gallon of gasoline.

Almost all outboard motors are of the two cycle type and difficult to start even on straight gasoline. When the fuel is loaded down with a non-volatile oil the difficulty is increased.

The average motor boat operator likes to run his craft at top speed most of the time. There is a thrill from speeding along on water which is said to be far greater than that experienced by the airplane pilot or passenger or the motorist on a straight stretch of open road. On the water speed appears to be far greater than it actually is. A motor boat going 35 to 40 miles per hour seems to be going several times that fast as it skims over the water.

It is estimated that the average runabout is a speed boat which is operated with the motor under full load and running at top speed about 85 per cent of the time. It is when an automobile motor is under full load with wide open throttle as while accelerating rapidly or climbing a steep hill that the motor tends to

(*Continued on Page* 80)

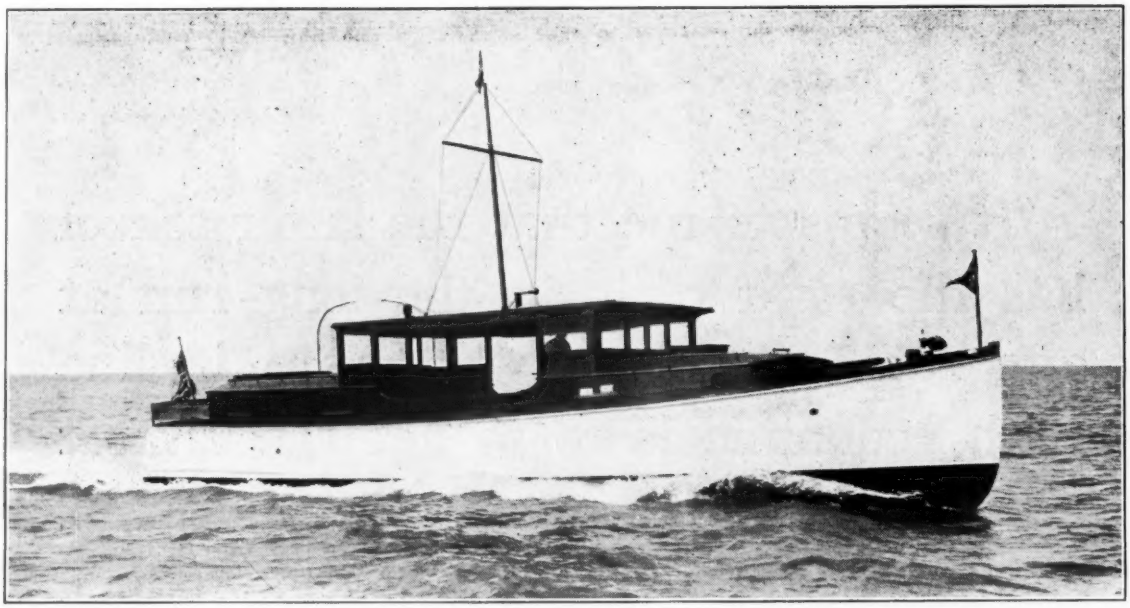
"It seems to me that the latter school has the right of it, in the long run at any rate. It certainly is more in line with economic laws to get the utmost possible gasoline out of the crude run, gasoline being the most valuable product, generally speaking, than it is to get a smaller yield of gasoline and sell the reduced crude for an inferior use at a losing price.

"Talking with refiners indicates that the latter school of thought is gaining recruits."

## Refiners of the latter school are dividend payers, at the same time promoting conservation

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
Owner and Licensor



—*Photo Courtesy Power Boating*

*A Matthews cabin cruiser, sleeping eight persons, with a speed of approximately* 16 *miles an hour*

knock, particularly when it is badly carbonized.

Most motor boat operators use their boats largely for pleasure. Commercial motor boats are greatly in the minority. This is one reason why the Naturaline Co. believes that a special quality fuel will find a ready market if it gives appreciably better service and thus adds to the enjoyment of the owner.

A survey of the potential market for gasoline in the motor boat field was made by the magazine Motor Boating for the company. This survey showed a total of 1,000,000 motor boats in the United States and an additional 350,000 outboard motors. The magazine estimated a gasoline consumption by these units in 1929 of 1,435,000,000 gallons.

The accompanying tabulation breaks down the boats by classification and shows how the gasoline consumption estimate was made up.

The special market for rectified natural gasoline is thought to be among the outboards and runabouts. During part of the year the cruisers might use such a product.

During the summer season a great deal of time and money is spent in boat racing at national and local regattas. It is said that one Detroit sportsman sent a truck loaded with 1500 gallons of his favorite gasoline from that city to New York so that his boats might be fueled in a certain race.

The rate at which motor boating is growing as a sport is reported to be miraculous. A manufacturer of outboard motors has estimated that at least 50,000 new motors of that class will be sold and put into use in the present season.

There was an increase of 10,699 motor boats of the numbered class in the year ended June 30, 1928 according to U. S. government records. Numbered boats are those exceeding 16 feet in length which are operated on federal waters. Since June 30, 1923, this class of registered boats has increased from 166,413 to 224,798.

## Ohio Standard Adds Scalp Tonic to Specialties

CLEVELAND—Scalp tonic and a household cleaning fluid put up in popular sized packages for easy handling, are two new specialties added to the Standard Oil Co. of Ohio line.

The latter product will be sold at service stations while the scalp tonic will be found at barber shops, hair dressing establishments and drug stores.

The cleaning fluid is compounded so that it does not evaporate fast enough to leave a ring on the garment and is still volatile enough to evaporate without odor in about a half hour. It is put up in half pint, red, white and blue lithographed tins, packaged 12 half pints to the case.

The company finds this is the most popular and practical size package, according to R. O. Cowin, manager of specialty sales, in the June 15 issue of "Sohio Sales," company publication. The can may be carried easily in the pocket of the car and is handy for home use.

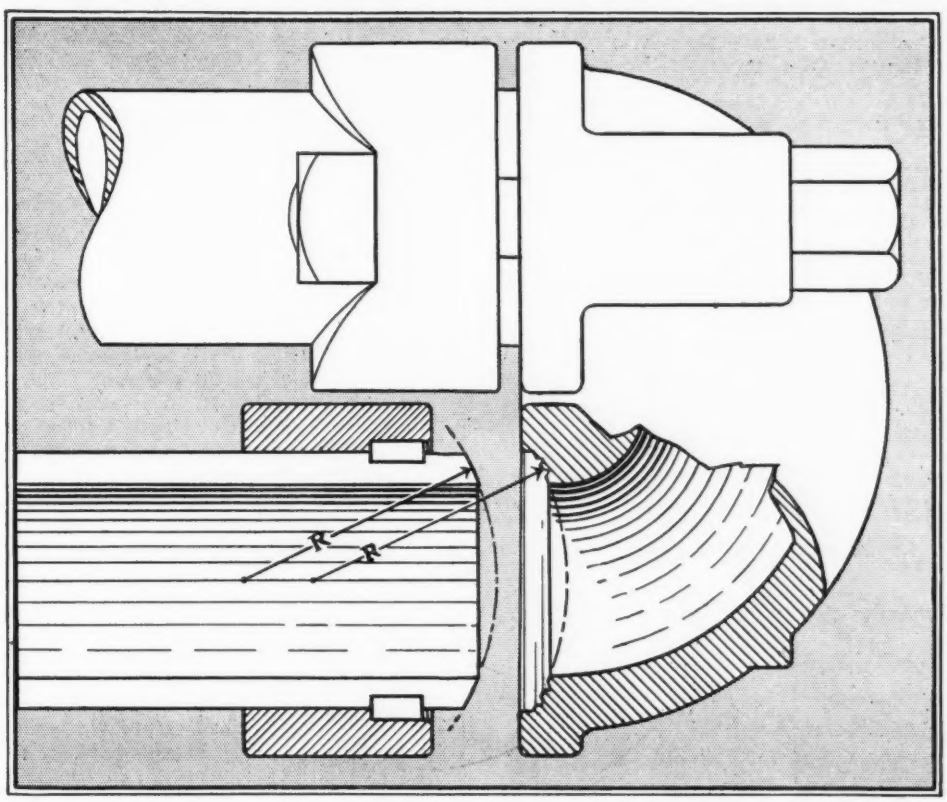
The scalp tonic has been developed because of popular demand for a crude oil for hair and scalp treatment. It is the natural crude from the ground but treated to remove objectionable elements.

## *Classification of Boats and Estimated Fuel Consumption*

| Number & Type | Av. Season | | Hours per Wk. | Hours per Season | Gals per Hr. | Gals per Season | Total Gallons |
|---|---|---|---|---|---|---|---|
| 750,000 Runabouts | 20 wks | x | 5 hours— | 100 hours @ | 4 gals — | 400 gals | 300,000,000 |
| 50,000 Comm. Boats | 40 wks | x | 50 hours— | 2000 hours @ | 6 gals — | 12,000 gals | 600,000,000 |
| 200,000 Cruisers | 25 wks | x | 10 hours— | 250 hours @ | 10 gals — | 2500 gals | 500,000,000 |
| 350,000 Outboards | 20 wks | x | 5 hours— | 100 hours @ | 1 gal — | 100 gals | 35,000,000 |
| | | | | | | | 1,435,000,000 |

# SECO RETURN BENDS

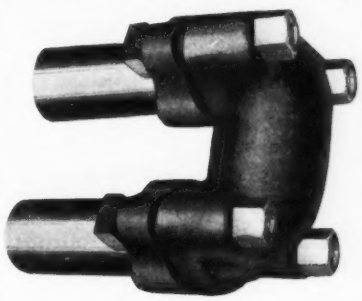
## *Only Two Joints in Each Fitting*




*The spherical tube end and seat in Seco Return Bends make a leakproof joint, even if the tubes are of uneven length or slightly misaligned*

THERE are but two joints in a Seco Return Bend—between the ends of tubes and the seats in the fitting. Both these surfaces are machined on a radius so that they are spherical segments, and consequently make perfect contact even though the tubes are of uneven length or slightly misaligned.

When tube replacement is necessary, a new tube can be readily coupled to an old one that has warped in service. An aluminum or copper gasket between the tube and seat assures a leakproof joint under all conditions.



The design of Seco Return Bends incorporates five other money saving features that it will pay you to know about. Complete information will be sent you promptly without obligation. Address your request to the nearest office.

SMITH ENGINEERING CO.,
109 W. Linwood Blvd.,
Kansas City, Mo.

DODGE STEEL CO.,
6501 Tacony St.,
Philadelphia, Pa.

*For All Pipe Stills*

## Billions of Bubbles

WHEN the coal man carries half the load back with him each trip he makes . . . figure for yourself how long it will take to get the bin filled up.

Now while your pencil is handy, figure—if you can—why the lean oil should go back to the absorber carrying, say, a 3% load of gasoline. Under these conditions 7% in the lean oil would net only 4%.

Contrast this with results obtained by Campbell Distillation Units. They strip the oil down to a few hundredths of one per cent and to a vapor tension of less than 1 mm.

Campbell Distillation Units return the oil empty to the absorbers so it can take on another full load. *Write for particulars.*

**J. A. CAMPBELL CO.**
*Natural Gas Engineers*
CONSULTING DESIGNING CONSTRUCTING
PHONE-416-93
P.O. DRAWER 669
LONG BEACH, CAL.

STEARNS-ROGER MFG. CO., DENVER
MID-CONTINENT AGENCY

**Originators of Oil-Froth Absorbers**



## Contact Filtration

***. . . still a popular refining step.***

*Sweetland Filter*

RECENTLY, we received an order for a battery of Sweetland Filters for contact filtration.

This refining step—where conditions warrant—is just as popular today as it ever was. The order mentioned bears evidence of this fact.

**OLIVER UNITED FILTERS INC.**

SAN FRANCISCO, Federal Reserve Bank Bldg. LOS ANGELES, Central Bldg.
NEW YORK, 33 West 42nd St. CHICAGO, 565 W. Washington Blvd.
SALT LAKE CITY, Felt Building LONDON, W. C. 1, 150 Southampton Row
PARIS, 63 Ave. des Champs Elysees


# New Specifications Satisfactory

CLEVELAND, June 27.—Fairly satisfactory.

That seems to be the verdict generally of refiners and natural gasoline manufacturers on the changes in the specifications for U. S. Motor gasoline made by the Federal Specifications Board June 11, (See page 27, June 19 issue NATIONAL PETROLEUM NEWS).

Unnecessary and perhaps likely to cause trouble, is the verdict of many of the same men on the specifications for the new, more volatile gasoline provided at the same time for government purchase under the name of Motor Fuel V.

The new U. S. Motor specifications provide:

Initial boiling point eliminated.

Maximum 10 per cent point 176 F., minimum 122 F. "provided that, for each per cent distillation loss less than 4 per cent obtained in the A.S.T.M. distillation, the minimum 10 per cent temperature requirement shall be lowered 5.4 F."

20 per cent point eliminated.

50 per cent point unchanged at 284 F.

90 per cent point unchanged at 392 F.

End point retained unchanged at 437 F.

Some possible trouble or at least confusion was foreseen in the reservation incorporated in the U. S. Motor specifications by which government purchasing officers are given the right to lower the maximum 10 per cent point by 9 or 18 degrees, depending on temperature conditions to be expected when the fuel is to be consumed.

Another reservation is that for gasoline to be used or stored in tropical climates the minimum 10 per cent point may be raised to 140 F.

A number of refiners and natural gasoline manufacturers were asked for their opinion of the new specifications.

The manufacturing head of a large Standard company replied that he saw no objection to the changes in U. S. Motor but thought the new Motor Fuel V grade unnecessary and out of line.

The assistant general superintendent of a company operating three Mid-Continent refineries thinks the specifications are all right but a weak spot is the option for the government buyer to lower the maximum 10 per cent point. Another Mid-Continent refiner finds the specifications quite satisfactory.

Vice presidents in charge of manufacturing of two Oklahoma refining

# Adequate Protection

**Depends upon a properly designed generator and pure, free-flowing dry chemicals—a generator that operates efficiently, with a minimum of attention, in the excitement of fire—no complicated operation. FOMON does!**

**And the use of proper chemicals is extremely important. They must be pure, 100% foam producing, easily handled and free-flowing. FOMON twin dry chemicals, fed simultaneously, meet all these requirements. Unlike the single powder method which contains a percentage of "filler" to preserve the ingredients, FOMON twin dry chemicals, requiring no "filler," are outstanding in that they produce 100% foam.**

**Every oil company, large or small, should be protected by FOMON. Our engineers, long experienced in oil fire protection, welcome the opportunity to prove the superiority of FOMON. Their services are available to the oil industry in helping to solve any fire protection problem.**

***Note:—the FOMON folder, giving description, with diagrammatic sketches, showing the portability and flexibility of the FOMON method of protecting oil properties will be sent upon request.***

## AMERICAN FOMON COMPANY

***Specialists in Fire Protection to the Oil Industry***

**Drexel Building**
**Philadelphia, Pa.**

*Complete Warehouse Stocks: St. Louis Tulsa - San Francisco*

At Last!

Louis Allis "Explosion-Proof" self-ventilated A. C. Motor

Patent Pending

a practical

"Explosion-Proof" Motor

for Refineries and Bulk Plants

Tested and Listed by Underwriters' Laboratories . . . For use wherever gasoline is made, used, or handled . . . The only approved "explosion proof" motor of self ventilated type . . . Weight is only half that of non-ventilated motor—and but slightly greater than ordinary open motor . . . Can be installed in practically same space as open motor . . . It is suitable, therefore, for mounting direct on pumps, etc. . . . It brings to refineries and bulk storage plants for the first time the economy and convenience of a small, safe, direct motor drive—without use of fire walls . . . Permitted under National Electrical Code.

*Practical—Safe—Economical*

*Standardize on this Louis Allis motor for your plant. Specify it on machines that you buy.*

Sizes 1 to 15 H. P. available now, ½ to 30 H. P. in near future.

*Write for descriptive pamphlet.*

THE LOUIS ALLIS CO.

*Motor specialists for 28 years* Milwaukee, Wis. *Offices in principal cities*



VAPOR PHASE REFINING

*WILL*

Increase your gasoline yields,
Improve your gasoline quality,
and
Reduce your refining costs.

THE GRAY PROCESSES CORPORATION
961-975 Frelinghuysen Avenue
NEWARK, NEW JERSEY


companies and the general superintendent of a third asserted they could find no fault with the changes while a third found the same fault as mentioned above, that trouble might be caused in the trade by the option for reduction of the maximum 10 per cent point.

Four natural gasoline manufacturers expressed satisfaction with the changes, all being of the opinion that they will cause the use of more rather than less of stabilized natural gasoline. They had fought for a reduction of the minimum 10 per cent point below 140 F. which was the figure first proposed by the government, because that would have restricted the amount of stable natural gasoline that could be incorporated in motor fuel.

## Ohio Standard Dedicates New Cracking Coils

CLEVELAND, June 27.—Two new Tube and Tank cracking coils at the Cleveland plant of the Standard Oil Co. of Ohio were fired up for the first time June 20. The new units were formally dedicated by President W. T. Holliday.

A. M. Maxwell, vice-president in charge of sales, J. S. Harrison, vice president in charge of manufacturing, George Burke, vice-president in charge of the lubricating oil division took part in the exercises. E. J. Marston, president and F. D. Bostaph, sales manager of the Texas Pacific Coal & Oil Co., Fort Worth, were guests.

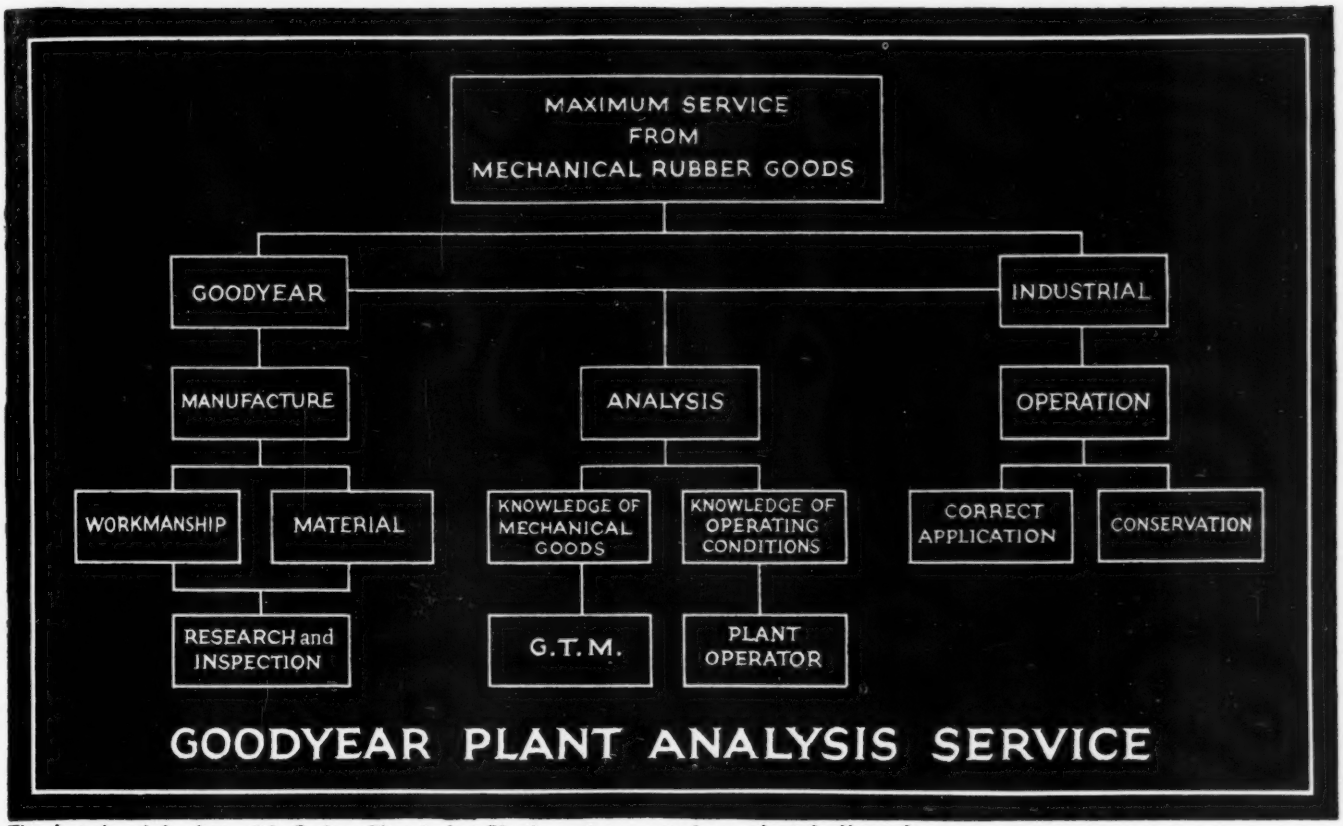
The two new units are similar to the two which have been running for more than two years at the plant and which have been described in NATIONAL PETROLEUM NEWS. One difference is that they will run under 1500 pounds pressure and 1000 F. temperature. They have an aggregate charging capacity of about 4500 barrels of gas oil a day.

### Study Gas Tax Distribution

RICHMOND, Va., June 27.—The legislative committee designated by the general assembly of 1928 to study a new method for the distribution among the one hundred counties of Virginia of the 1½ cents of the State gasoline tax for roads held its organization session here June 12 and began work on its problem.

It is necessary to find a new allocation basis due to recent changes in the tax laws which have destroyed the old basis. Pending new legislation, the 1925 state tax payments of the counties has been the basis of distributing the money.

Among the plans that have been discussed have been those to make the allocation basis the number of automobiles licensed in the counties and the amount of gasoline tax collected in the counties.




*This charts the orderly relation of the Goodyear Plant Analysis Plan for maximum service from mechanical rubber goods*

# The Plant Analysis Plan—and the G. T. M.

***This chart is valuable*** to every man who has to deal with belting, hose or packing problems. It shows the principal factors in the Goodyear Plant Analysis Plan, and makes clear the part that is played in more efficient, economical plant equipment by the G. T. M.—Goodyear Technical Man.

***You know the idea*** behind the Goodyear Analysis Service. It is simply this, that you are bound to get more work and better work, done more efficiently and more economically from the *right* mechanical rubber goods, specified to the job. How the *right* product is found by analysis is shown on this chart.

***Here you see the G. T. M.*** and your plant operator, each applying his special experience and knowledge to the problem in hand, whether it be a single drive or an entire plant equipment. They make the analysis together.

***The G. T. M. is an expert*** on mechanical rubber goods. He knows their special properties. He is trained in the science of their specification and application. His work takes him into many plants, in many industries, so that he is familiar with most transmission and conveying problems, and is a practical authority on many of them.

***When he comes to your plant,*** he comes as a friendly analyst of your operating problems, your troubles, maybe. He doesn't pretend to know it all. He gladly takes the advice of your superintendent and engineer.

***His entire purpose*** is to fit what he knows about belting, hose or packing to the demonstrated conditions of service in your plant. If he can find out what you can use to best advantage, he will recommend it to you. Then, on your order, Goodyear will build your equipment according to those approved specifications. And after it is installed, the G. T. M. will follow it up with a service that will see that you get out of your equipment all the value built into it by this scientific analysis and careful manufacture.

***Doesn't it stand to reason*** that you are likely to get the utmost in trouble-free, long-wearing service out of that kind of equipment? The proof of the Goodyear Analysis Plan is in the records—many of them published in these pages during the past twelve years—of better, more productive and more economical work done by G. T. M.-specified goods in hundreds of plants, in every line of industry.

***There is a G. T. M.*** in your neighborhood. It may pay you well to have him analyze your needs or problems. If you want to get in touch with him, or receive detailed information about the service Goodyear Mechanical Rubber Goods—belts, hose, molded goods, packing—are giving in your particular industry, write to Goodyear, Akron, Ohio, or Los Angeles, California.

BELTS · MOLDED GOODS · HOSE · PACKING

GOODYEAR

Copyright 1929, by The Goodyear Tire & Rubber Co., Inc.

## Oil flows freely through Oakite-cleaned tubes

OIL cooler tubes cleaned out regularly with a solution of an Oakite material, show increased heat transfer and free flow of oil.

Oakite cleaning washes out every trace of film, dirt and foreign matter without scraping or brushing. Tubes are cleaned to the metal — heat conductivity is at maximum — resistance to flow at minimum.

Read our booklet "Oakite in the Oil Industry" for complete directions and formulas for doing this and many other cleaning jobs economically and effectively. A copy will be sent to you on request.

*Oakite Service Men, cleaning specialists, are located in leading industrial centers of U. S. and Canada.*

Manufactured only by

OAKITE PRODUCTS, INC.
42C Thames St., New York, N. Y.

**OAKITE**
TRADE MARK REG. U.S. PAT. OFF.
*Industrial Cleaning Materials and Methods*



## A Leak-Tight Seal Without Wasteful Friction!

The efficiency of any liquid or gas seal depends on the amount of pressure. Until now this has meant pressure *against the shaft*, resulting in loss of power, scored shafts, motor overload. With the Cooke Seal Ring the pressure is exerted against a fractionally small surface of the gland by the smooth running surface of the Ring which revolves *with the shaft* and is backed by a spring. The Cooke Seal Ring eliminates all possibility of leakage, any scoring of shaft, and 90% of the friction caused by ordinary packing. One of a dozen reasons why Cooke Seal Rings are being installed everywhere on pumps, compressors, swivel joints, drills, etc. Write us for details.

**COOKE**
**Seal Ring**

42 N. Green Street,
Chicago, Illinois—Dept. P


# *Along the Air Lanes*

An entry in the Upper Peninsula Air Tour which started from Sault St. Marie, Mich. and visited many Michigan points, was the Ryan Brougham four-passenger plane of the Bartles-Maguire Oil Co., Milwaukee.

This company, however, started its trip from Milwaukee, stopping to see customers and give them rides at various points in its territory.

J. M. McLaughlin, vice president, is a member of the Air Service Committee of the Milwaukee Association of Commerce. He was a passenger in the plane on this tour. Elmer Leighton, chief instructor at the Midwest Airways, Inc., flying school of Milwaukee, piloted the plane.

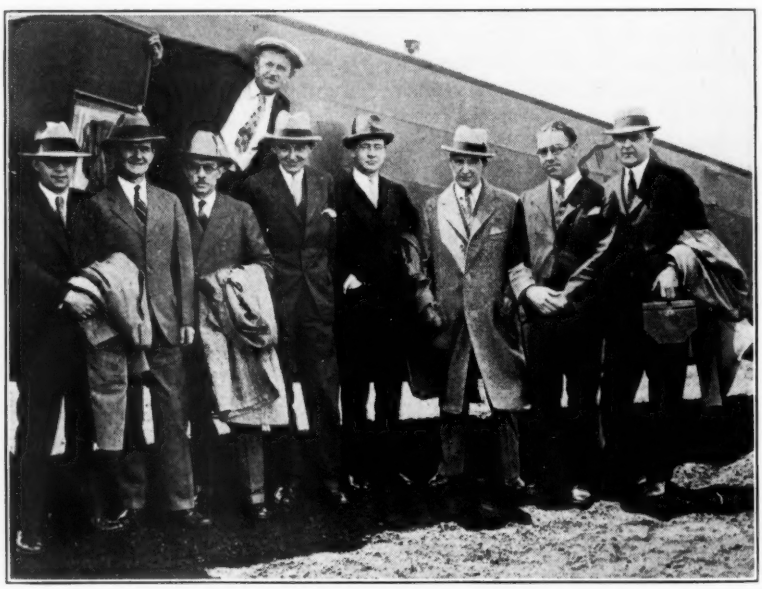
Among the points visited on this tour were: Green Bay, Merrill, Antigo, Mattoon and Wausau, all of Wisconsin; and Escanaba, Sault Ste. Marie, Menominee, St. Ignace, Newberry, Manistique, Blaney, Munsing, Marinette, Ispheming, Negaunee, L'Anse, Houghton, Hancock, Calumet, Ontonagon, Ironwood, Bessemer, Wakefield, Iron River, Crystal Falls and Iron Mountain, all of Michigan.

One completed airplane each day is the plan of the $250,000 airplane factory which will be built by the Butler Aircraft Corp., subsidiary of the Butler Mfg. Co., Kansas City, Mo.

The latter's all steel structures will be used and the erection of three initial buildings will begin at once. A 15-acre tract has been leased by the company in Kansas City for this plant on that part of the municipal airport reserved for industries. The present airplane factory will be discontinued when the new buildings are in operation. Access from the plant to the Missouri River is possible, this being desired in anticipation of building amphibian planes.

Several types of planes will be produced, principally the "Black Hawk" open and cabin types which the company now makes. Mail planes will also be built and a training plane is now being developed.

The Butler Aircraft Corp. was organized last year, with E. E. Norquist, as president; Roy S. Kemp and William A. Knapp, vice presidents. Other Butler Mfg. Co. officials serve as executives of the aircraft company also.



*Several of this group of Shell Petroleum Corp. executives had just landed at the Chicago airport from St. Louis on the first lap of a nation-wide air jaunt when this picture was taken. From left to right: Earl L. Miller, newly elected vice president in charge of sales, St. Louis; John Munro; J. A. Strong, distributing manager; Milton Girton, pilot; T. M. Berlage, Chicago manager of the company; P. C. Downey; W. J. Hartigan; Mr. Casey, superintendent of field, and A. F. Scheidt, assistant manager at Chicago*

## Special Muleskin Folio

Your Name in Gold FREE

Complete Net $7.50

362K—Special made folio from heavy double weight muleskin in handsome shark grain. Has three pockets, heavy leather straps and handle, gold lock, bottom reinforced with steel studs. Inner case contains six 4-oz. bottles, partitioned separately, lined with red velvet. Metal capped corks furnished. Case also contains five grease jars.

*Other styles in our FREE Catalog*

**L-U-C-E**

*Builders of Sales Luggage*

614 Delaware, Kansas City, Mo.



## PROFITS from Retailing Fuel Oil

ARE you buying right? Do your contracts with customers really protect you? Are you servicing at the lowest possible cost? Are you making money?

I have been in the business for many years. I have made good money—only because I knew the business.

I am now in position to consult with a few firms who are going into the business—or those in the business who are not making good profits.

**W. A. Dalton**

*Retail Fuel Oil Consultant*

1000 Madison St., Gary, Ind.



1879 GOLDEN ANNIVERSARY YEAR 1929

# 100% Pennsylvania Motor Oils

## *—with an "extra" which costs you nothing*

You get an "extra" when you contract for FREEDOM 100% Pennsylvania Motor Oils—it costs you nothing.

The "extra" is that you get the product of an organization 50 years old this year—an organization which has *specialized* in the study and refining of 100% Pennsylvania Crude.

This line of motor oils is the blend of highly refined products from two FREEDOM refineries—460-470 flash Bright Stock (Sharples process) refined at the Coraopolis plant—100% Pennsylvania Crude high flash Neutrals refined at the FREEDOM plant.

FREEDOM 100% Pennsylvania Motor Oils will please your customers and help expand your business. A half century of fair dealing guarantees it.

Write for quotations. Immediate shipment can be made in tank cars, compartment tank cars, barrels, or drums.

Guaranteed 100% PURE PENNSYLVANIA OIL

Permit No. 31

*Also available for immediate shipment*

- 460-470 flash, minimum 85 Visc., low cold test Bright Stock (Sharples process).
- FREEDOM 100% Pennsylvania Crude high flash Neutrals.
- 100% Pennsylvania Motor Oils, blended to your own specifications from FREEDOM 460-470 Bright Stock and FREEDOM 100% Pennsylvania Crude high flash Neutrals.
- FREEDOM 600 Steam Refined.
- FREEDOM filtered low end point Kerosene.

THE FREEDOM OIL WORKS COMPANY
Freedom, Penna.

*Established 1879*

Refineries at Freedom and Coraopolis, Pennsylvania

FREEDOM

*Architect's drawing of the station showing design of air-water standards and gasoline pumps*

# Pierce Combines Sandwich Shops With Service Stations

By J. C. Chatfield
N. P. N. STAFF WRITER

ST. LOUIS

A NEW link in its chain of installations designed to meet the needs of the motor tourist is being undertaken by the Pierce Petroleum Corp. The new project is a group of combination service stations and sandwich shops.

The first group of these shops now is being built on the outskirts of St. Louis. One is to be built on each of the ten principal highways leading into the city.

The first is nearing completion on U. S. Highway 66 a half mile west of Ballas road. This is about 16 miles west of 12th and Locust streets.

A unique feature of the service for tourists will be the making of reservations at any hotel in the city. An attendant at each station will call any hotel at which the tourist may wish to stay reserving any type of room which may be desired.

The attendant will hand the tourist a registration card showing the number of the rooms assigned and the rate to be paid. When the tourist reaches the hotel he can have his automobile sent to the garage, present his card to the hotel clerk exchanging it for a key to the accommodations reserved.

This service will eliminate a great deal of bother for the automobile tourist entering a strange city. Information about the various hotels, their location and rates, will be available to him and he will be assured of having a room the first place he applies.

This is a particular convenience at city hotels where the tourist finds it difficult to locate a parking space where he can leave his car while he inquires about accommodations.

No charge will be made for the service. The Pierce expects to get its pay in gasoline, oil and sandwich business at the various stations and increased advertising and business for its own chain of tourist hotels which now is being built.

The first sandwich shop of the chain is on a 3-acre site having a frontage of 300 feet on Manchester road (Highway 66). The highway pavement in front of the station has been widened to permit cars to leave and enter the line of traffic without difficulty. Two 60-foot concrete drives lead in from the highway.

The station building is set back 131 feet from the highway. This allows ample room for servicing cars at the pump island and for convenient maneuvering of vehicles to parking room.

A large space about the station building will be graveled as indicated in the accompanying sketch of the grounds. Curb service of soft drinks and sandwiches will be offered or the motorists may enter the building. Room is being provided for 150 cars.

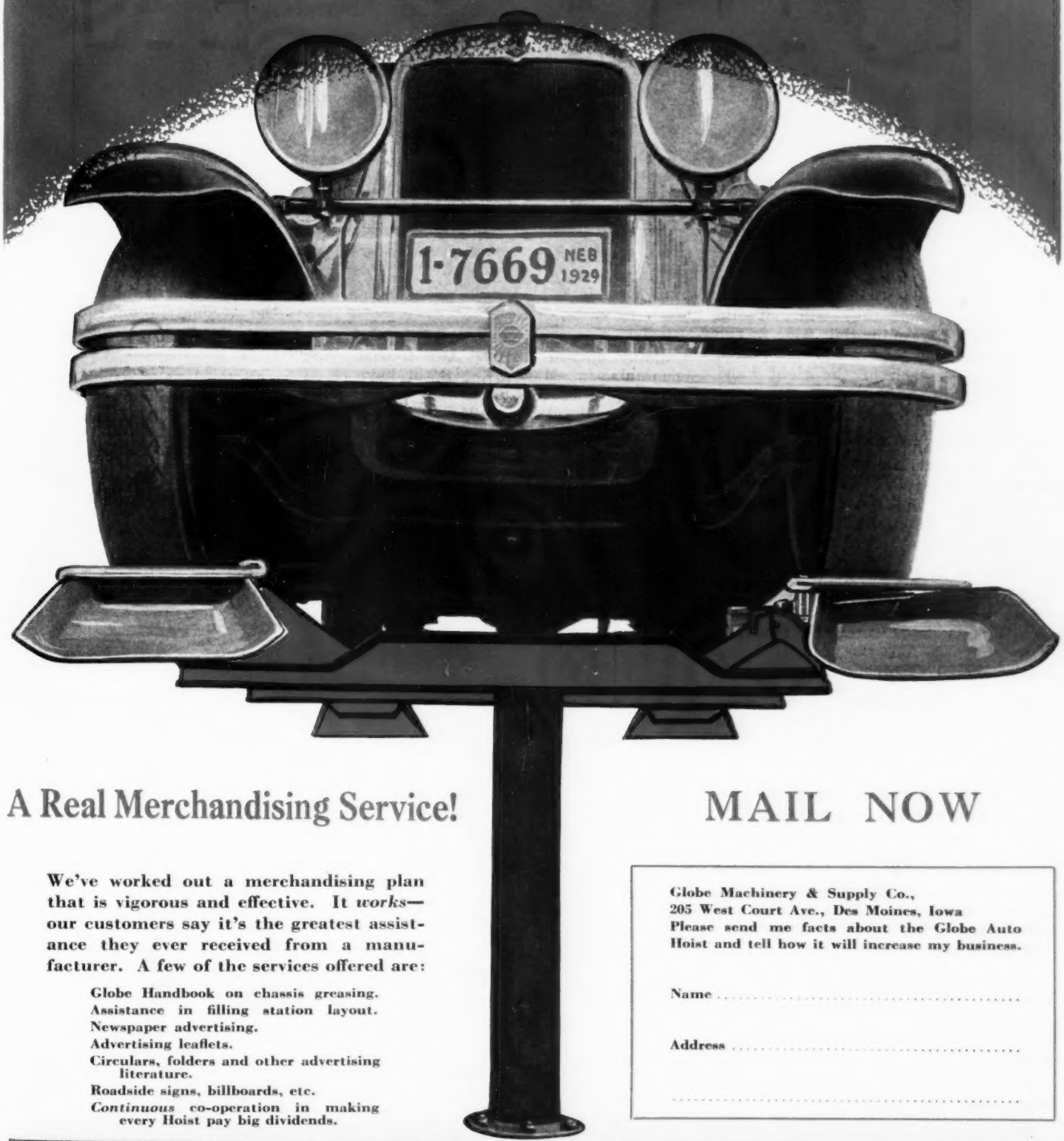
The building will be 100 feet long by about 25 feet. It will be built of white-washed brick with the wood trim in jade green. The colonial type of architecture will be followed giving the station the same general aspect as the tourist hotels and highway restaurants and service stations being built in the southwest.

A CENTRAL feature of the building will be the sandwich shop, a room about 20 by 40 feet equipped with a soda fountain and tables. Behind this room will be the kitchen. To the right will be women's rest rooms and toilets with similar facilities for men on the left.

An extension of the west wing is to accommodate the service station offices and grease pits. Two pits, each capable of handling two cars at a time will be in this wing.

Unusual care has been taken in designing the toilets for these stations. On the inside of the door to each compartment is to be a large mirror. The coat hook is to be arranged that a garment hanging from it will not cover the toilet paper fixture. Within easy reach of a person sitting on the stool will be an ornamental metal shelf on which

# with a GLOBE AUTO HOIST *you don't want!*




## A Real Merchandising Service!

**We've worked out a merchandising plan that is vigorous and effective. It *works*—our customers say it's the greatest assistance they ever received from a manufacturer. A few of the services offered are:**

- **Globe Handbook on chassis greasing.**
- **Assistance in filling station layout.**
- **Newspaper advertising.**
- **Advertising leaflets.**
- **Circulars, folders and other advertising literature.**
- **Roadside signs, billboards, etc.**
- ***Continuous* co-operation in making every Hoist pay big dividends.**

## MAIL NOW

**Globe Machinery & Supply Co.,**
**205 West Court Ave., Des Moines, Iowa**
**Please send me facts about the Globe Auto Hoist and tell how it will increase my business.**

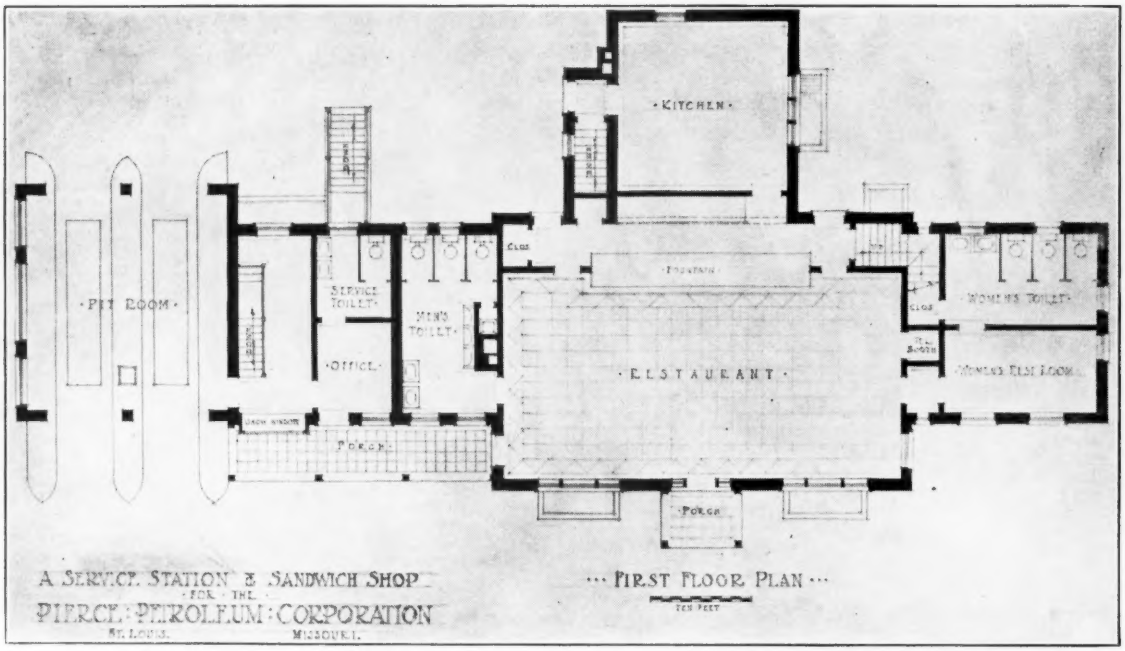
**Name** .....

**Address** .....

.....

## GLOBE MACHINERY & SUPPLY CO.

**205 West Court Ave., Des Moines, Iowa**




*Floor plan of the combination service station and sandwich shop*

ladies may place their purses or what not so that they will not slip off their laps onto the floor. The toilet paper fixture is to be placed within easy reach of the right hand and in plain sight.

Jade green Duco over slate has been chosen in place of marble or other material for wainscoting and dividing walls between toilet compartments. The slate is easily worked and when covered with Duco, is easily washed and kept spotless.

Specially designed gasoline pumps and water-air standards have been ordered for the service island. Gasoline pumps and water-air standard will alternate on the island, being placed on 20 foot centers.

Slender iron standards surmounted by colonial lamp globes have been fitted with brackets to hold water and air hose.

With the alternating standards set at such convenient distances it will be possible to service a car from any point beside the island. Other cars arriving after one is stopped may drive in ahead and be serviced without waiting. A car behind another may drive away without waiting for a car ahead to move.

The pump island at the Manchester road station will carry five gasoline pumps and four air-water standards.

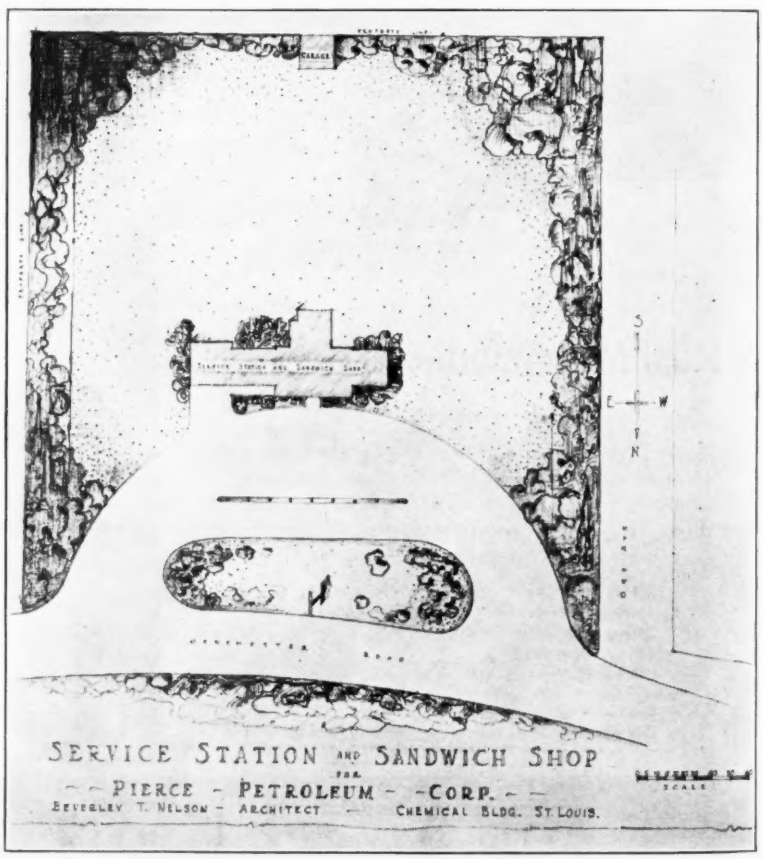
Present plans of the management are to have the 10 stations open 24 hours each day.

**Pierce** now is building 40 room tourist hotels at Columbia and Rolla, Mo. It has elaborate restaurant and service stations at Rolla, Columbia and Springfield, Mo. and at Miami and Tulsa, Okla. Another station of that type is to be built near Oklahoma City.

It was nearly a year ago that the company opened its first two tourist terminals in Missouri. Both have been highly successful as outlets for gasoline and oil as well as doing a big restaurant business.

Recently an ambulance has been added to the equipment at the Rolla station to meet the needs of persons who become ill on the road or are injured in motor accidents in the vicinity of the station.

A small Ford panel truck has been fitted up for combination light hauling service for the restaurant and as an ambulance. The interior of the truck has been arranged so that a cot may be placed in it and fast-

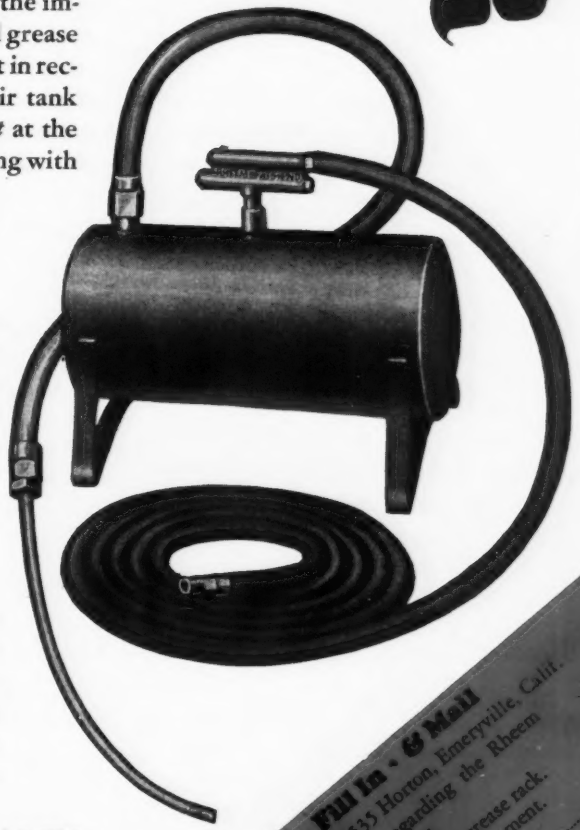



*Plan of grounds at Pierce sandwich shop service station*

# Rheem FLUSHER

## Makes quick work of Gear Case Cleaning

**Profit** on the grease rack depends on the speed with which each operation is handled. Hook an air hose to the improved *Rheem Gear-Case Cleaner* and old grease can be drawn out and flushing oil run through and drawn out in record time. The control valve shown on top of the reservoir tank changes the operation from *High Suction* to *Powerful Blast* at the touch of a finger. Completely enclosed in a single brass casting with all parts enclosed and protected, this valve is indestructible. *It is also very economical in the consumption of air!*



### *Helps* get *and* keep *business*

Equipped with the Rheem Gear-Case Cleaner, the grease rack quickly gains a reputation for quality work. Every particle of the old grease is drawn from the walls and cut from the surface of each gear. The kerosene or flushing oil is completely expelled... quickly.

### *A profitable item for Oil Companies to handle*

Oil companies can handle the Rheem Gear-Case Cleaner to advantage, especially in connection with campaigns to increase the consumption of grease. The ruggedness and effectiveness of the device, and its sparing consumption of air are sales points that appeal to every operator. A guarantee backs it up.

## RHEEM · MANUFACTURING · COMPANY

4535 Horton Street, Emeryville, California

Los Angeles, California 1001 East First Street
Phoenix, Arizona 42 S. Central
Portland, Oregon 480 Hoyt Street
Seattle, Washington 1518 First Avenue, South
Albuquerque, New Mexico, 118 E. Central Ave.
Spokane, Washington 819 Main Ave.

**Tear Here · Fill In · & Mail**

Rheem Manufacturing Co., 4535 Horton, Emeryville, Calif.
Send complete information regarding the Rheem Gear-Case Cleaner.

☐ I am interested in equipping a grease rack.
☐ I am interested in a sales arrangement.

Name
Address
City
State
70

*See advertisement of* OPACO *Products on preceding pages.*

# "You'll learn, Joe"

"TAKE for instance in handling oil. Lots of fellows think they're saving money and time by having filled containers of oil standing around, ready to serve customers. *I wouldn't have 'em.* They're often inaccurate. They're hard to use with some kinds of cars. They *don't* save time, because most people get more than one quart anyway. They break. But the *worst* thing about 'em is that customers don't trust 'em. They won't *say* anything. They won't *tell* you they'd rather see their oil drawn from a tank with a label on it. They don't want to *say* that maybe you're a crook. But they just get their oil somewhere else next time.

What I started out to say was that it would pay to buy Brookins Oil Measures even if they cost a lot more than any other kind—which they *don't.*"

Serve oil to your customers as they *want* it served—quickly, neatly and without suspicion. These new style Brookins Measures are the most up-to-date equipment you can get for the purpose. Ask your regular jobber or write to us direct.

*"An honest measure for honest oil"*

*Every* item in the Brookins line has exclusive practical advantages. Ask your Jobber salesman . . . or write us direct

**Brookins Manufacturing Company**
**Dayton, Ohio**

Brookins
SERVICE STATION EQUIPMENT


ened in place for a long or short journey to a hospital.

Illness and motor accidents in the vicinity of Rolla some time ago convinced E. D. Levy, Pierce president, that the station could win good will and business by offering some sort of emergency service.

As a result a room in the terminal has been equipped with an operating table, surgical instruments and other emergency medical requirements. This plan is being followed at other tourist service plants.

The Pierce emergency ambulance has been fitted with chromium plated hardware and painted with Duco in company colors. Injured or sick tourists will be taken in it to the hospital of their choice without charge.

## Eleven Media Introduce White Star Ethyl

DETROIT, June 28.—Eleven media were used by the White Star Refining Co. to introduce the sale of Ethyl gasoline through its stations in Michigan last week.

They were newspaper advertisements, posters, direct mail pieces, lawn signs, pump globes, pump markers, transfers, lawn bulletin boards, banners, window trim, and circulars.

Full page space was used in each of the three Detroit newspapers beginning June 9 by the Ethyl Gasoline Corp. announcing that White Star Refining Co. had been licensed to manufacture White Star Ethyl. The same advertisement was published in principal state newspapers on June 10.

Nineteen Michigan newspapers regularly carrying White Star advertising published the company's advertisements for White Star Ethyl beginning June 16.

Banners were displayed at service stations a few days before June 16. About 300 24-sheet billboard posters were placed throughout the territory. Tank trucks carried banners. Special window trims were provided for service stations, and circulars were passed out to customers.

Letters were mailed to every automobile dealer and truck fleet operator in the territory.

White Star Ethyl gasoline was shipped about June 1 from the new refinery at Trenton, Mich. Base stock was supplied from the company's Wood River refinery, and the mixing done at Trenton. The new Trenton refinery is expected to be in operation about July 1, and the base stock will be refined there.

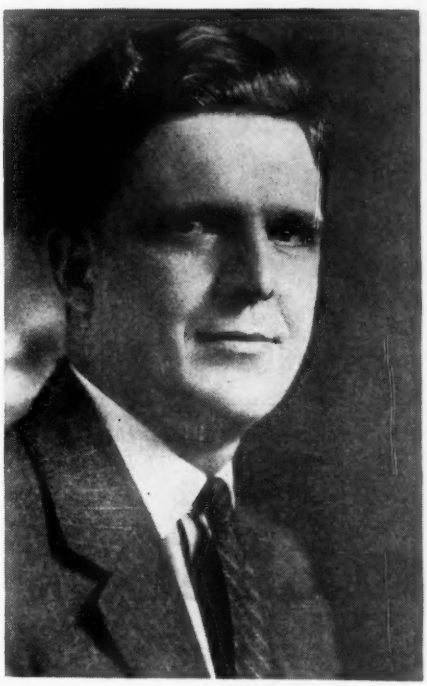
Organization meetings were held through the territory during the last half of May to acquaint the sales force with the new product. Two

representatives of the Ethyl Gasoline Corp. attended the meetings.

White Star will sell Ethyl gasoline through Michigan for the time being, as some Canadian customs are to be worked out before sale will begin in the Canadian division.

Approximately $75,000 was spent by White Star in equipment for mixing and selling White Star Ethyl and for the extensive advertising campaign.

## Jobber Forms Tank Car Marketing Branch



*Roger Q. Howard*

CHICAGO, June 28.—The Lynch-Clarisey Co., Chicago jobbers, announce the establishment of a wholesale tank car marketing department. Roger Q. Howard will be in charge of the new department with offices at 208 So. LaSalle St. His duties will also embrace purchasing all merchandise sold by the Lynch-Clarisey Co.

Mr. Howard is one of the best known marketers doing business in the Chicago territory. He was associated with the James B. Berry's Sons Co. of Chicago for seven years, serving first as traffic manager and later as head of the tank car marketing department. Since Jan. 1, 1927 Mr. Howard has been in charge of the tank car marketing division of the Swan-Finch Oil Corp., Chicago.

Prior to coming to Chicago, Mr. Howard served as chief clerk to the traffic manager of the Santa Fe railroad, with headquarters at Galveston, Texas.


# If you want the best grease package for your grease.... use CANTUBE

**You want your grease packaged the most modern, the most effective way—sure you do! And you want it packaged in a container that can carry good advertising display. And you want a container that will sell easily and quickly to all motorists—a good repeater. You get this and *more* with Cantube. It fills grease guns or open grease cups without muss—without soiling the hands or clothing.**

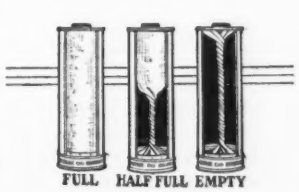
**Cantube is composed of a rigid outside container, with a collapsible bag on the inside. By turning the bottom rotating plug the exact amount of grease needed is expelled.**

**Many of the largest oil companies are packaging their grease the *best* way—with Cantube. Many of the smaller oil companies and jobbers are utilizing the "Stock Cantube," a handsomely lithographed package that saves high lithography costs.**

**Cantube is the logical container for your grease. The coupon below will bring you a sample Cantube and full details of this remarkable grease package. Send it today!**

## NATIONAL CANTUBE CO., INC.

**1330 N. Halsted St.**
**CHICAGO**



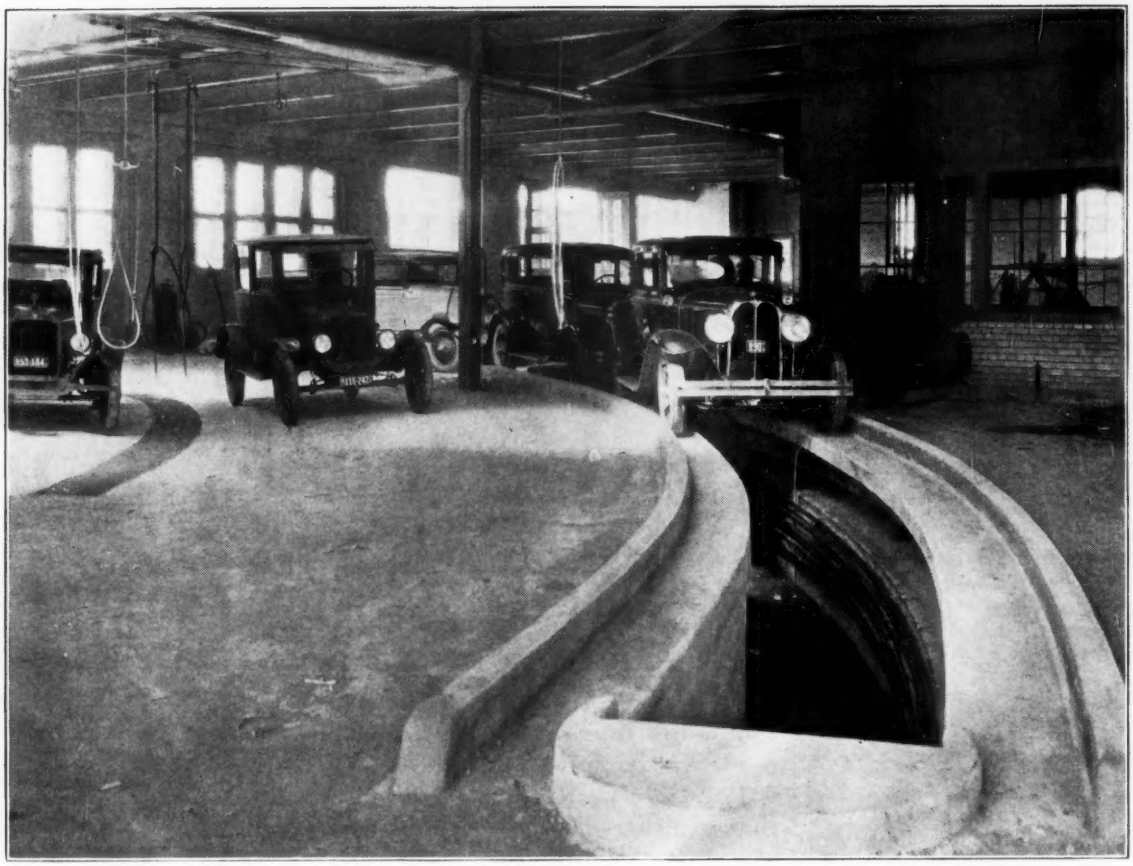

**MAIL COUPON NOW!**

National Cantube Co., Inc.
1330 N. Halsted St., Chicago, Ill.

Please send me, without obligation, a sample Cantube for my inspection, also descriptive literature.

Name.....

Address.....



*The above picture was made of "Ten Minute Wash" after the building was complete and before the machinery was installed. It shows the car-washing department at the left and the inclosed room for cleaning motors in the background*

# What Kind of Service Station Is It Without a Gasoline Pump?

ST. PAUL, Minn.

CHASING away the "space peddlers" for daily newspapers, who come to ask if he wants to buy any advertising today, has put W. P. Driscoll of St. Paul in a habit of saying that he does not advertise. But any motorist who drives by his place of business is obliged to confess that he is a clever advertiser.

Take the name of his establishment for example: "The Ten Minute Wash." It might just as well have been called "The W. P. Driscoll & Sons Corp.," because it is an incorporated family affair. G. L. Driscoll is vice president and J. F. Driscoll (another son), is secretary-treasurer. But the public is a lot more interested in a 10-minute wash than they are in the Driscolls, and the Driscolls know it. That almost proves they are good advertisers.

Then there is a second clever advertising feature. His is a complete lubrication station, automobile laundry and a 60-car storage garage, but gasoline can not be bought on the premises. There is not a gasoline pump in a block of the place, in spite of the fact that it is on one of the most heavily traveled streets in the world—"University Avenue," connecting Minneapolis and St. Paul.

"And why" Mr. Driscoll was asked, "don't you sell gasoline?"

"There are several good reasons," he replied.

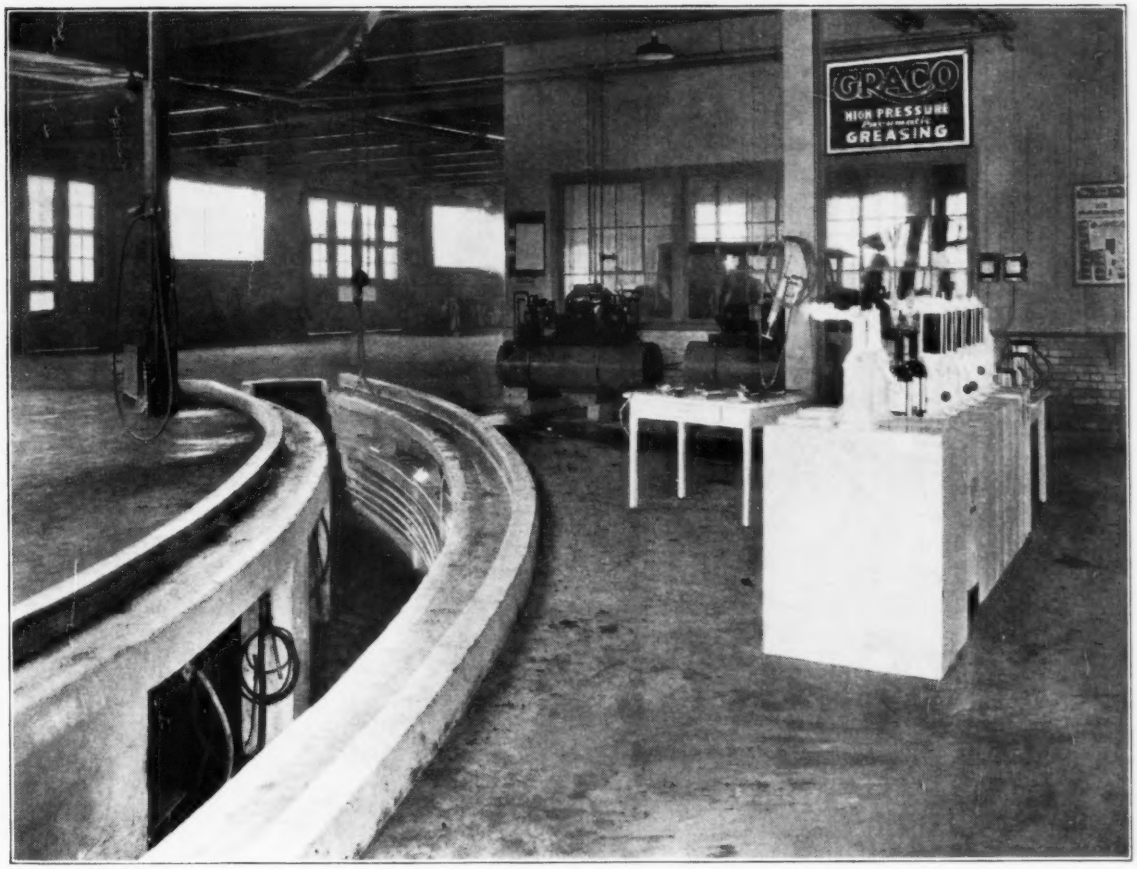
"Gasoline pumps outside the station on the curb would be a lot of bother to the workmen inside, or they would require another man to stay outside and serve a few customers. Gasoline pumps inside the station would nearly double my fire insurance rate without earning much money. But my main objection to it is that gasoline is so highly competitive.

"There are gasoline pumps all up and down the street in every direction. One station may have a grease pit and another a wash rack, but they all have gasoline. Then here is a tire store and there a battery shop, but they both sell gasoline. We are different. We do not sell it. And all the others send us trade. We are not a competitor."

Although the building is large, it is not the size nor capacity of the automobile laundry or the grease pit that makes the place remarkable. It is the number of new ideas that Mr. Driscoll has worked into his architecture and the lay-out of his equipment.

He believes he has the only curved grease pit in the world. The car washing department also is built in the shape of an arc. The arrangement adapts itself to space and convenience as the accompanying floor plan and photographs will show.

THE corner of the building nearest the street intersection is utilized for office space, customers' waiting room, toilet rooms, etc. The waiting room is shaped like a quarter segment of a circle, with the point toward the street intersection. The curved side




*Observe working space in the curved grease pit. The cave below the inside arc provides room for tools and oil tanks under pressure. Steam radiator and light fixtures are visible inside the outer wall. The lift for relaxing springs is overhead*

is separated from the larger compartment where the work is done, by five big windows and two glass doors.

The waiting room is furnished with ten wicker chairs and a davenport, all placed so their occupants must look toward the work room. This leaves the light from the outside windows behind them, the correct arrangement if they want to read.

A convenient magazine rack is constantly supplied with ten or more popular magazines. These are constantly being carried away by customers at Mr. Driscoll's suggestion—whenever the greasing job is finished before the customer has finished his story. That is pretty often.

The wash rack accommodates six cars. But there is no moving ramp or other expensive car-handling equipment. The automobiles are washed by men who wield water sprays and brushes, while they stand in rubber boots on a concrete floor which drains the used water through an iron grating into a sump and thence to the sewer. There is a mud trap in the sump to prevent trouble which might result from floating the mud into the sewer. The sump is cleaned daily, after 6 o'clock which is the closing hour.

The grease pit is arranged to accommodate three automobiles at once. Ordinarily one car stays over the pit 20 minutes which gives the lubrication department a capacity of 12 cars an hour. A multiple installation of Graco lubricating equipment, made by the Gray Co., of Minneapolis, embodying three pistols for chassis greasing, three spray guns for springs and three outlets for gear compound, all fed from a central supply under pressure, constitutes the greasing equipment in the pit. There is a noticeable absence of superfluous tools and containers in the pit.

THE design of the pit is responsible in a great measure for what seems to be a great deal of room in it. Beneath the inside curve of the pit is a cave, extending its full length. This cave houses the tanks of oil and grease installed permanently. The tanks are refilled by removing the manhole covers in the floor on the main level.

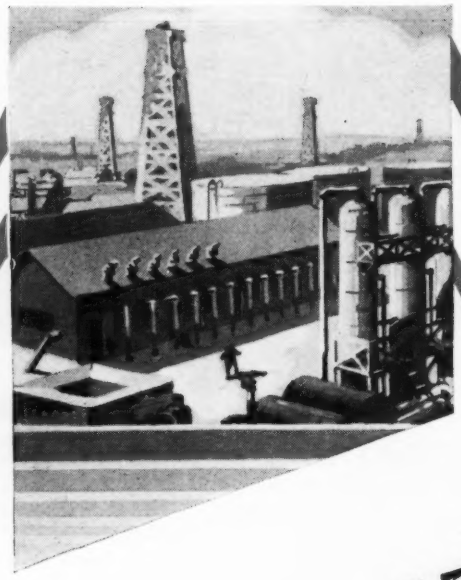
Along the outside curve of the pit a four-pipe steam radiator is installed full length of the wall. With this radiator, the temperature in the pit can be raised to 80 degrees F. without difficulty. This is entirely for the comfort of the workmen in the pit. A separate heating arrangement is provided for the space above ground.

Just above the steam radiator and below the outer curve of the long pit are six lighting cabinets, so arranged that there are two under each car when the pit is full. Each lighting cabinet contains two 200-candlepower lamps. Besides three outlets each for chassis lubricant, gear compound and penetrating oil for the springs, the pit has outlets for dry steam with which gear boxes are warmed and cleaned inside, of all hardened grease.

Below ground also are outlets for compressed air for tires and outlets for hot and cold water. The water in the grease pit is not used on the automobiles however. It is for cleaning the pit after the work is done each day.

Mr. Driscoll's gear lubricating equipment is so arranged that the gear grease is weighed, and the weight recorded on a dial, as it is injected into a customer's car. Before he had served a single customer in this way, Mr. Driscoll invited the city sealer of weights and measures to visit his place and test the machines for accuracy. Thus he got that official's sanction before the equipment was used.

One of the most conspicuous features of the grease pit is noticeable in the photographs. The concrete flanges that guide the automobile on its route over the pit, are on the outside of the car wheels instead of the inside. This, Mr. Driscoll says, is



Form 1206 A

| NO. | CASH OR CHG. |
|---|---|
| | CHECK |
| | TIME FILED |

# WESTERN UNION

J. C. WILLEVER, FIRST VICE-PRESIDENT

NEWCOMB CARLTON, PRESIDENT

| CLASS OF SERVICE DESIRED | | | |
|---|---|---|---|
| DOMESTIC | | CABLE | |
| TELEGRAM | | FULL RATE | |
| DAY LETTER | | DEFERRED | |
| NIGHT MESSAGE | | CABLE LETTER | |
| NIGHT LETTER | | WEEK END LETTER | |

Patrons should check class of service desired; otherwise message will be transmitted as a full-rate communication.

*Send the following message, subject to the terms on back hereof, which are hereby agreed to*

1929 MAY 31 AM 2:45

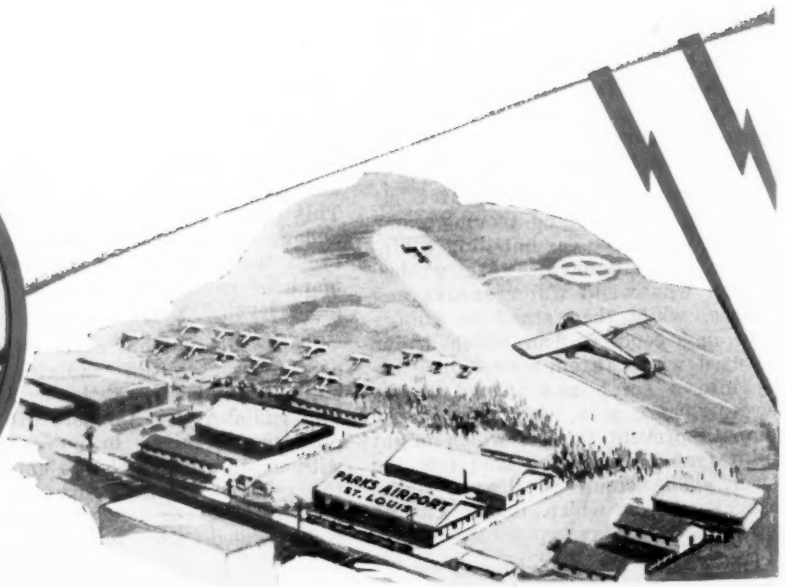
AA4 40 NL 2 EXTRA - SAINT LOUIS MISSOURI 30

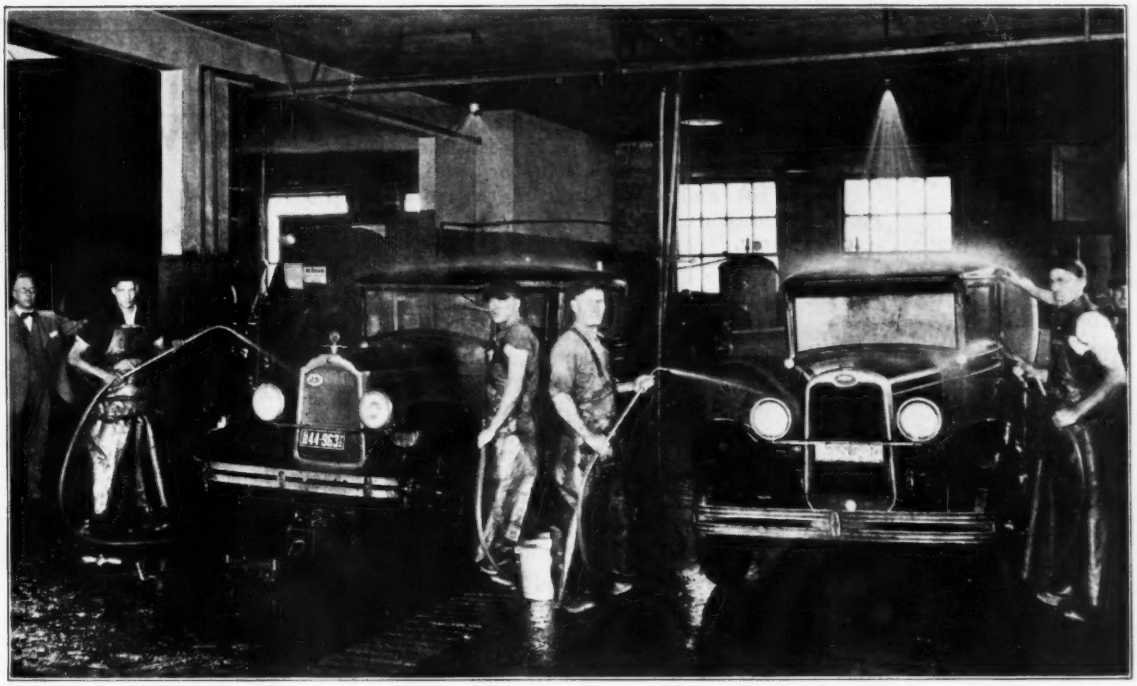
NATURALINE COMPANY OF AMERICA
CHESTNUT & SMITH BUILDING
TULSA OKLAHOMA

GARDNER TROPHY RACE TODAY STOP NINE SHIPS STARTED FIVE FUELED WITH NATURALINE WINNING FIRST SECOND THIRD AND FOURTH PLACE STOP FIFTH SHIP FUELED WITH NATURALINE DOWN DUE TO FABRIC BLOWN OFF FUSELAGE STOP GREAT VICTORY FOR WONDERFUL FUEL CONGRATULATIONS

E ROY ALEXANDER RACE MANAGER
GARDNER CUP RACE

C. W. "SPEED" HOLMAN FIRST





*Workmen at the Ten Minute Wash Corp., in St. Paul pause and pose for a photograph in the middle of a busy Saturday afternoon. The establishment has a capacity of six cars and no special conveyor equipment*

safer than the old method because the motorist can see them better on the outside of his wheels. But that is not the main object of the new arrangement. The primary motive was to allow more room to work.

The men working below ground can see better what they are doing and reach points of lubrication on the automobile with more ease when the flange of the track is back out of their way, Mr. Driscoll contends.

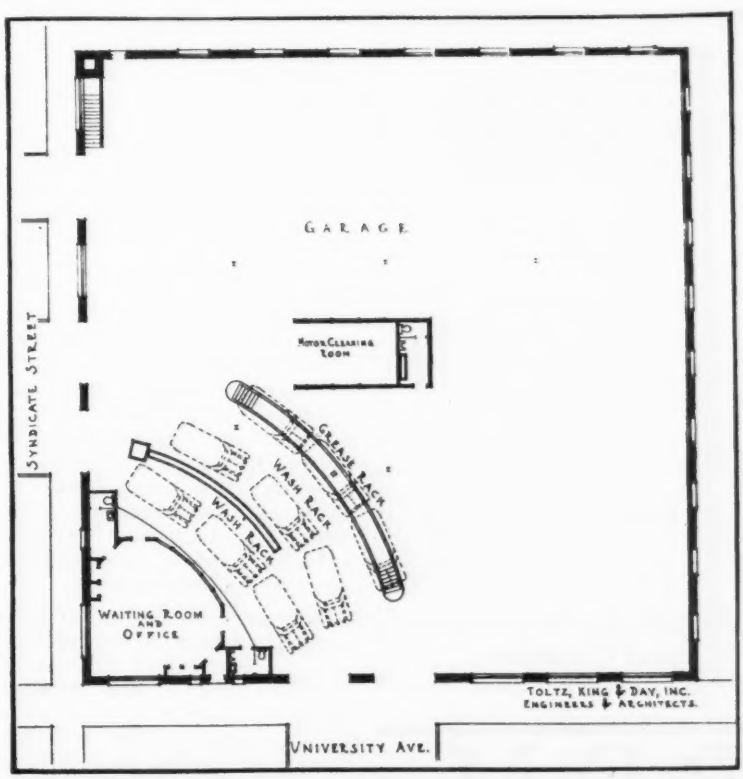
Another novel convenience of Mr. Driscoll's grease pit is the moving crane that travels on the curved track overhead. There is nothing mechanically new about it but its application is novel. The same pieces of equipment are ordinary in machine shops. In this case it is used to replace the various forms of jacks and props often used in grease pits to manipulate the automobiles.

If it is necessary to lift the weight of a motor off the front springs in order to lubricate them, the pull is made from overhead. The hook on the lower block is attached to a pair of specially made "cant-hooks" which spread out and take hold of any kind of a car at some safe and convenient place. The overhead installation obviates the need of many awkward pieces of equipment often improvised for grease pit use.

The men who work in the pit never have to come above ground. One greaser is always present on the main level to lubricate those connections which can't be reached from the pit—especially a deep pit like this, designed to allow the workmen free use of their bodies in a comfortable, upright position. The above-ground workman has compressed air convenient and chassis grease under pressure, just as have the men in the pit. He also has a variety of small tools at his disposal which are laid out in an attractive exhibit on a white kitchen table in plain view of the motorists.

The automobile laundry, which actually does wash a car well (all but the motor) in ten minutes, uses equipment of the National Auto Laundry system. No hot water, no soap and no chemicals are used except under the car where it will not hurt the paint job. The laundry process is one of softening the dirt with a spray and washing it off.

Motors are cleaned in a special room which Mr. Driscoll designed him-




*This lay-out shows the general arrangement of equipment in the most talked-about super service station in the Twin Cities. It is situated to serve both Minneapolis and St. Paul*

**STEADY CUSTOMERS ARE PROFITABLE CUSTOMERS.....**

One coupon book often forms a buying habit that links the purchaser to your stations indefinitely. You make a bigger profit on these steadies. They drive in regularly, often coming many blocks out of their way and buy FULL tanks.

Write us for full information, samples and prices. There are a lot of reasons why you will prefer Allison Coupon Books.

**ALLISON COUPON CO.**
INDIANAPOLIS, IND.
SINCE 1888



**-TANKS-**

STANDARD P.D.M.
CLOSED TANKS FOR ALL PURPOSES

**P. D. M.** tanks are designed and built to safely store inflammable liquids of any type. Highly combustible oils are confined with surety, as all seams are welded or riveted-and-welded, tested and guaranteed tight at a pressure of five pounds per square inch. They meet all the requirements of the Underwriters' Laboratories and can be furnished with Underwriters' Labels if desired.

**P. D. M.** tanks, carried in stock and ready for immediate shipment, range from 75 to 26,000 gallons in capacity.

**Pittsburgh-Des Moines Steel Company**
**55 Neville Island, Pittsburgh, Pa.**

**-P.D.M.-**


self. In this compartment, about the size of a two-car garage, a special hood hangs over the motor and the fumes that rise into the hood are pulled through a pipe out of the building by induced draft. In this compartment are outlets for live steam, hot and cold water, kerosene under pressure, thin water spray and dry air.

EVERY car that enters the building to be washed or lubricated is given a vacuum cleaning inside, gratis. The establishment works 14 people every day and four extras on Saturday. Five brands of lubricating oil in all grades are carried on the floor. The 60-car garage is not being used much currently and Mr. Driscoll's opinion is that it will have very small demand until winter.

The heating system for the garage, a large open space with high roof, employs low pressure steam. The steam passes through individual unit heaters with a fan to blow fresh air, warmed by the hot coils, giving circulation and even temperature to the whole building.

Mr. Driscoll says the land on which his building stands, represents an investment of $40,000 while the building alone cost $44,000 and the mechanical equipment in it cost $18,000. The occasion of his opening the establishment a few weeks ago was celebrated by the "Midway Club" without any expense or worry to Mr. Driscoll at all. The club advertised the event, and came and brought a band to show their appreciation of the addition to their section of town.

Compressed air for all the oil and grease tanks and for other purposes, is built up by three large compressors: two 5 and one 3-horsepower machines. They are installed and wired in such sequence that they are automatic. If business is so rushing at some time that one compressor can not do all the work, the second one comes automatically to its assistance and helps to build up the needed pressure. No. 3 joins in if the other two can't provide enough by their combined capacities.

Steam is generated in the basement by two boilers equipped with oil burners. Mr. Driscoll has to buy considerable fuel oil to augment the fuel he gets from crank case drainings, dissolved grease, etc. The burners are automatic, controlled by the steam pressure. Seldom does anybody have to visit the basement.

A remarkable feature of the garage is that its floor is not level nor does it have any general direction of slant. It is "rolling" if that term may be made to apply to a floor as well as to landscape. The concrete floor drains, gently but positively, to three iron gratings through which water may flow to the sewer.

The idea is to prevent the floor


# Now Ready for Service Stations,

**Auto Dealers and Garages**

**Car-life REGISTERED Service** TRADE MARK

Simple, inexpensive and so appealing to car drivers that in actual operation it

**DOUBLES THE SALES OF LUBRICANTS**

We can refer you to Car-Life users who service 30 to 40 cars daily. These are not "transients"—but *regular customers* who return each 500 miles for lubricating service.

**NO NEW EQUIPMENT TO BUY—USE ANY LUBRICANTS YOU WISH**

*Car-Life is merely a service plan, requiring only a few printed supplies. It carries no restrictions as to lubricants or equipment.*

Car-Life Lubrication was perfected with the aid of some of the largest oil companies in America.

It is as adaptable to the small station or garage as to the largest "super" station.

*Full particulars and proof free for the asking*

**COREY & McKENZIE CO.**
**Omaha, Nebr.**

from becoming sloppy in winter. Cars entering the garage for storage usually bring in more or less snow. In the warm building the snow melts off. If a garage floor is level it is wet almost all winter. This one will drain fast enough to be kept nearly dry.

Mr. Driscoll's desk is in the back corner of the waiting room where he, like the customers, can see everything that takes place in the work room. This gives him a chance to oversee the work personally, even though both his sons work on the floor. Back of Mr. Driscoll's desk is the cash register and a cigar stand which he attends to also.

On the wall, near the cash register, is a row of small electric switches which control the doors on all sides of the building. Without moving from his desk he can close the building up tight. If an automobile should be washed or lubricated and the owner neglect to pay his bill before getting in it to drive out, the door would close in front of him without any apparent effort on the part of anybody.

## Spencer Petroleum Holds Fourth Annual Frolic

CHICAGO, June 28.—Spencer Petroleum Co. held its fourth annual golfing outing and dinner dance at the Medinah country club June 20.

About 75 local oil men and their wives as well as a number of out of town jobbers were in attendance to enjoy the luncheon and dinner dance in the outdoor pavilion. Golf was played both in the morning and afternoon, although the morning session was just the "warming up" for the championship match.

Some keen competition was shown in the golfing events with Fred Plane, Johnson Oil Refining Co., carrying off the low gross honors with an 81. H. Jensen, of Spencer, was second low gross with 85. R. A. McCornack, Refiners Petroleum Co., was low net with a 73 and Jos. B. Mudd, Lake Petroleum Co., second low net with a 79. The "booby" prize was won by Jack King of Sun Oil Co., who shot 130 for the eighteen holes.

---

Mineral oil consumption in Switzerland has increased 132 per cent the last 20 years. About 355,000 barrels of gasoline were imported in 1928; 73,470 barrels of kerosene; 58,614 barrels of lubricating oils and 169,503 barrels of petroleum residue.

---

Belgium's entire oil supply is imported. Imports rose from 1,021,200 barrels in 1927 to 1,189,200 barrels in 1928.


2nd TO NONE

In *Semi-trailer* Construction

THROUGHOUT the oil transportation industry, the trend is toward the well-balanced, semi-trailer truck tank, powered with a tractor unit. A truck, serving as a tractor, hauls two and a half times its normal carrying capacity.

Columbian pioneered the development of the welded truck tank and is second to none in ***semi-trailer*** construction. In the recent Cleveland tests, conducted by the National Refining Company, a Columbian ***semi-trailer*** demonstrated its outstanding efficiency. Although lighter by nearly 900 pounds than competitive semi-trailer truck tanks, it hauled a ***payload*** 600 pounds greater.

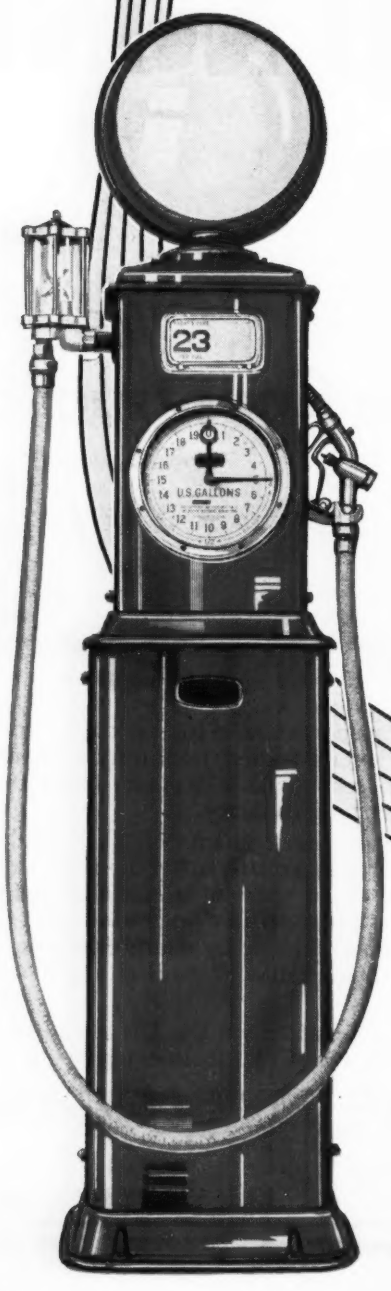
Write us for detailed information on the Cleveland tests and other data on oil deliveries with Columbian equipment.

**COLUMBIAN STEEL TANK COMPANY**

EST'D 1894

1405-1625 WEST 12TH STREET KANSAS CITY, MISSOURI

# Now QUALITY




ONCE more the Bennett basic policy of intensive specialization and large volume production has been brought into play. Again greatest usefulness and highest value has been built into three complete families of products *regardless of cost* with the certainty that resultant volume demand will leave room for profit under the attractive market price.

No matter where you are; what your conditions of *Use*, *Space* or Appropriation; or what the limitations of the "Weights and Measures" code in effect in your section—there is a Bennett Pump of the type, size and variation to meet your every requirement and yet serve you better and longer at no extra investment.

Bennett's three great complete lines of new gasoline pumps are the triumphant culmination of years of successful gasoline equipment and pump production—by five great factories—each an authority and a success in its own right.

Know the line—learn its superiority—employ its advantages.

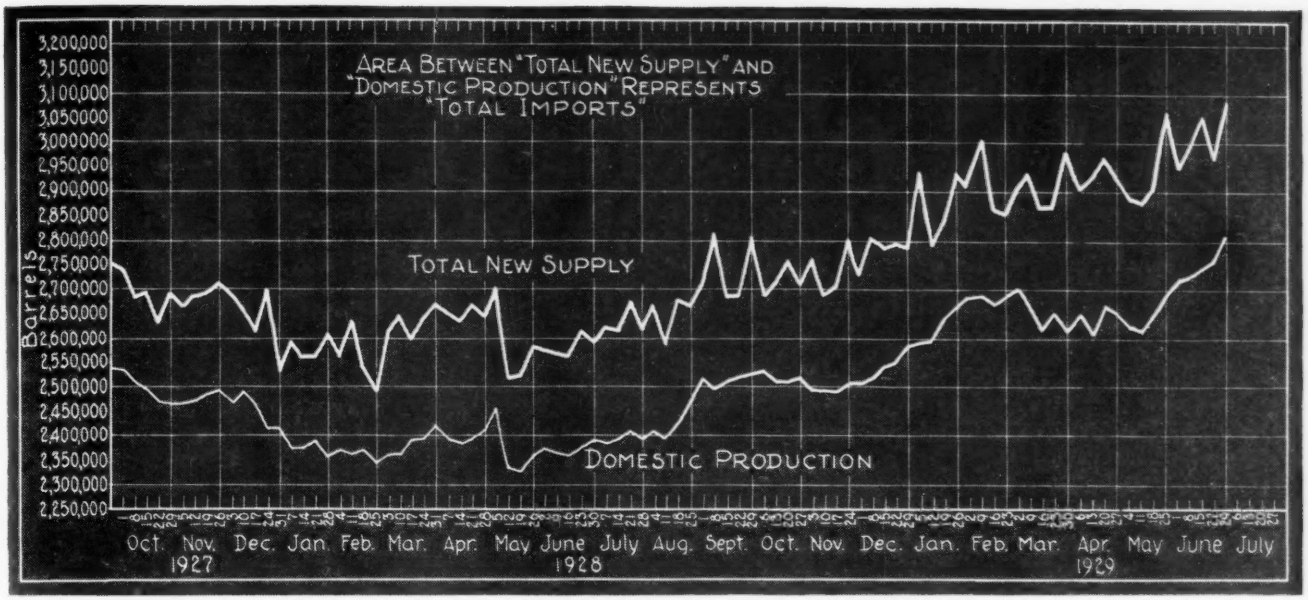
**BENNETT PUMPS CORP.**, Muskegon, Michigan
Service Station Equipment Co., Toronto and Winnipeg
Republic Steel Package Co. of Calif., Richmond, Calif.
Bennett Export Corp., 32 Broadway, New York

## BACKED BY *the National and International Resources* of FIVE GREAT MANUFACTURING ORGANIZATIONS

Never before in the history of the industry have such vast resources been marshalled to determine, design and produce each single new product or whole group of devices. Abundant money; a corps of noteworthy engineering authorities specializing in the gasoline equipment field; and the unequalled consolidation of five specializing manufacturing organizations assure superiority to each new Bennett gasoline pump right from the start.

The many thousands of fine gasoline pumps already in use throughout the United States and Canada—products of Bennett companion factories—prove the quality and hint at the popularity that is bound to come to the Bennett complete line of Metering, Visible and Piston Type Pumps—for every gasoline dispensing purpose.

# Daily Average Crude Oil Production and Imports




**Daily average gross output of United States, by fields, for week ending with dates below as compiled by American Petroleum Institute**

## PRODUCTION SUMMARY

| | June 29 | June 22 |
|---|---|---|
| **Production east of Rockies** | **1,954,900** | **1,929,000** |
| **Increase** | | **25,900** |
| **Total production in U. S.** | **2,815,400** | **2,764,500** |
| **Increase** | | **50,900** |
| **Crude oil imports** | **276,857** | **208,571** |
| **Increase** | | **68,286** |
| **Total crude supply** | **3,092,257** | **2,973,071** |
| **Increase** | | **119,186** |

### OKLAHOMA

| | June 29 | June 22 |
|---|---|---|
| Allen Dome | 24,200 | 23,450 |
| Blackwell | 3,850 | 3,750 |
| Bowlegs | 35,300 | 35,100 |
| Braman | 3,750 | 3,700 |
| Bristow-Slick | 18,750 | 18,850 |
| Burbank | 19,750 | 19,800 |
| Carr City | 13,650 | ..... |
| Cromwell | 8,150 | 8,100 |
| Cushing | 18,550 | 18,750 |
| Davenport | 1,450 | 1,450 |
| Duncan District | 7,250 | 7,200 |
| Earlsboro | 74,050 | 63,000 |
| Fox | 1,400 | 1,400 |
| Garber | 5,850 | 5,750 |
| Graham | 4,250 | 4,250 |
| Healdton | 12,900 | 12,800 |
| Hewitt | 8,050 | 8,100 |
| Hubbard | 1,850 | 1,850 |
| Little River | 77,250 | 78,500 |
| Logan County | 19,200 | 16,650 |
| Maud | 12,850 | 26,650 |
| Mission | 34,800 | 34,900 |
| North Okmulgee | 12,800 | 13,000 |
| Oklahoma City | 9,800 | 3,200 |
| Osage (outside Burbank) | 26,550 | 26,350 |
| Papoose | 3,300 | 3,250 |
| Pearson | 1,250 | 1,350 |
| St. Louis | 81,350 | 88,600 |
| Scholem-Alechem | 12,800 | 12,650 |
| Searight | 12,250 | 11,800 |
| Seminole | 34,100 | 33,950 |
| South Okmulgee | 8,350 | 7,700 |
| Thomas | 950 | 900 |
| Tonkawa | 10,000 | 9,900 |
| Wewoka | 4,800 | 4,800 |
| Yale-Jennings | 6,950 | 7,000 |
| Others | 66,050 | 61,200 |
| Total, Oklahoma | 698,400 | 679,650 |
| Increase | | 18,750 |

### KANSAS

| | June 29 | June 22 |
|---|---|---|
| Augusta-Fox Bush | 3,100 | 3,100 |
| Churchill | 6,400 | 6,350 |
| Eldorado-Towanda | 12,900 | 12,950 |
| Florence-Covert | 950 | 950 |
| Greenwood County | 21,300 | 21,500 |
| Oxford | 4,500 | 4,550 |
| Peabody-Elbing | 2,800 | 2,800 |
| Rainbow Bend | 1,050 | 1,100 |
| Russell | 3,300 | 3,350 |
| Sedgwick County | 34,600 | 34,250 |
| Others | 31,000 | 30,500 |
| Total, Kansas | 121,900 | 121,400 |
| Increase | | 500 |

### NORTH LOUISIANA

| | | |
|---|---|---|
| Bellevue | 600 | 600 |
| Caddo, light | 8,400 | 9,100 |
| Caddo, heavy | 3,400 | 3,400 |
| Cotton Valley | 2,750 | 2,700 |
| De Soto and Red River | 3,850 | 3,800 |
| Elm Grove | 600 | 600 |
| Haynesville | 5,250 | 5,200 |
| Homer | 3,900 | 3,950 |
| Pleasant Hill | 500 | 450 |
| Urania | 5,900 | 5,950 |
| Others | 250 | 250 |
| Total, North Louisiana | 35,400 | 36,000 |
| Decrease | | 600 |

### ARKANSAS

| | | |
|---|---|---|
| Champagnolle | 7,200 | 7,250 |
| El Dorado | 4,550 | 4,600 |
| Lisbon | 1,250 | 1,250 |
| Nevada | 950 | 950 |
| Smackover, light | 6,100 | 6,100 |
| Smackover, heavy | 48,400 | 48,550 |
| Stephens | 1,000 | 1,000 |
| Others | 100 | 100 |
| Total, Arkansas | 69,550 | 69,800 |
| Decrease | | 250 |

### TEXAS (Outside Gulf Coast)

#### Panhandle District

| | June 29 | June 22 |
|---|---|---|
| Carson County | 7,650 | 7,500 |
| Gray County | 51,300 | 58,400 |
| Hutchinson County | 25,550 | 26,000 |
| Wheeler County | 800 | 750 |
| Others | 1,250 | 1,200 |
| Total, Panhandle Texas | 86,550 | 93,850 |
| Decrease | | 7,300 |

#### North Texas

| | | |
|---|---|---|
| Archer County | 17,850 | 17,200 |
| Burkburnett | 8,800 | 8,900 |
| Electra | 12,350 | 12,200 |
| Iowa Park and K. M. A. | 4,950 | 5,000 |
| Montague-Cooke | 12,900 | 12,750 |
| Wilbarger | 26,300 | 26,400 |
| Others | 700 | 700 |
| Total, North Texas | 83,850 | 83,150 |
| Increase | | 700 |

#### West Central Texas

| | June 29 | June 22 |
|---|---|---|
| Brown County | 7,750 | 7,600 |
| Callahan County | 4,300 | 4,150 |
| Coleman County | 3,850 | 3,700 |
| Eastland-Desdemona | 6,550 | 6,450 |
| Jack County | 2,800 | 2,700 |
| Palo Pinto County | 350 | 400 |
| Shackleford County | 11,800 | 11,650 |
| Stephens County | 6,250 | 6,200 |
| Throckmorton County | 700 | 600 |
| Young County | 6,950 | 6,800 |
| Others | 600 | 600 |
| **Total, West Central Texas** | 51,900 | 50,850 |
| Increase | | 1,050 |

#### West Texas

| | June 29 | June 22 |
|---|---|---|
| Crane and Upton Counties | 46,450 | 46,700 |
| Crockett County | 2,000 | 2,000 |
| Howard County | 42,500 | 44,000 |
| Jones County | 3,300 | 3,450 |
| Mitchell and Scurry Counties | 2,700 | 2,700 |
| Pecos County | 110,100 | 95,500 |
| Reagan County | 18,200 | 18,400 |
| Winkler County | 142,250 | 144,300 |
| Others | 1,600 | 1,750 |
| Total, West Texas | 369,100 | 358,800 |
| Increase | | 10,300 |

#### East Central Texas

| | | |
|---|---|---|
| Boggy Creek | 2,850 | 2,900 |
| Corsicana-Powell | 7,700 | 7,800 |
| Currie | 350 | 400 |
| Mexia | 5,600 | 5,700 |
| Nigger Creek | 400 | 500 |
| Richland | 400 | 400 |
| Wortham | 1,000 | 1,000 |
| Total, East Central Texas | 18,300 | 18,700 |
| Decrease | | 400 |

#### Southwest Texas

| | | |
|---|---|---|
| Dale | 400 | 450 |
| Laredo District | 10,950 | 11,000 |
| Luling | 11,950 | 11,800 |
| Lytton Springs | 900 | 900 |
| Salt Flat | 50,200 | 52,000 |
| Somerset | 1,700 | 1,750 |
| Others | 3,700 | 3,900 |
| Total, Southwest Texas | 79,800 | 81,800 |
| Decrease | | 2,000 |
| Total, Texas (Outside Gulf Coast) | 689,500 | 687,150 |
| Increase | | 2,350 |

### GULF COAST

#### Coastal Texas

| | June 29 | June 22 |
|---|---|---|
| Barbers Hill | 10,200 | 8,750 |
| Batson | 1,450 | 1,500 |
| Big Creek | 4,000 | 3,050 |
| Blue Ridge | 4,250 | 4,000 |
| Boling | 1,550 | 1,600 |
| Damon Mound | 650 | 700 |
| Goose Creek | 5,700 | 5,800 |
| Hull | 8,400 | 8,950 |
| Humble | 5,500 | 5,650 |
| Orange County | 3,000 | 2,900 |
| Pierce Junction | 17,600 | 18,700 |
| Raccoon Bend | 6,600 | 6,100 |
| Saratoga | 850 | 850 |
| Somerville | 2,650 | 2,600 |
| Sour Lake | 2,750 | 2,700 |
| South Liberty | 5,300 | 5,400 |
| Spindletop | 26,800 | 26,400 |
| Sugarland | 12,600 | 11,100 |
| West Columbia | 6,450 | 6,300 |
| Others | 4,000 | 4,250 |
| Total, Coastal Texas | 130,300 | 127,300 |
| Increase | | 3,000 |

#### Coastal Louisiana

| | | |
|---|---|---|
| East Hackberry | 2,000 | 2,100 |
| Edgerly | 700 | 750 |
| Evangeline | 2,800 | 2,950 |
| Lockport | 3,700 | 3,950 |
| Old Hackberry | 2,300 | 2,400 |
| Sorrento Dome | 200 | 200 |
| Sulphur Dome | 2,000 | 2,000 |
| Sweet Lake | 300 | 300 |
| Vinton | 4,250 | 4,500 |
| Others | 700 | 800 |
| Total, Coastal Louisiana | 18,950 | 19,950 |
| Decrease | | 1,000 |
| Total Gulf Coast | 149,250 | 147,250 |
| Increase | | 2,000 |

### ROCK MOUNTAIN

#### Wyoming

| | June 29 | June 22 |
|---|---|---|
| Big Muddy | 2,250 | 2,250 |
| Elk Basin | 750 | 800 |
| Grass Creek | 2,300 | 2,250 |
| Labarge | 2,100 | 2,100 |
| Lance Creek | 250 | 250 |
| Lost Soldier | 3,900 | 4,050 |
| Oregon Basin | 4,300 | 4,300 |
| Rock Creek | 2,300 | 2,250 |
| Salt Creek | 30,850 | 27,250 |
| Others | 3,900 | 4,550 |
| Total, Wyoming | 52,900 | 50,050 |
| Increase | | 2,850 |

#### Montana

| | | |
|---|---|---|
| Cat Creek | 1,450 | 1,450 |
| Pondera | 3,150 | 3,150 |
| Sunburst | 6,850 | 6,850 |
| Others | 100 | 100 |
| Total, Montana | 11,550 | 11,550 |

#### Colorado

| | | |
|---|---|---|
| Florence | 1,000 | 900 |
| Fort Collins | 2,500 | 2,450 |
| Moffat (Craig) | 1,600 | 1,300 |
| Others | 2,450 | 2,350 |
| Total, Colorado | 7,550 | 7,000 |
| Increase | | 550 |

#### New Mexico

| | | |
|---|---|---|
| Artesia | 850 | 900 |
| Hogback | 150 | 200 |
| Rattlesnake | 100 | 100 |
| Table Mesa | ..... | 650 |
| Others | 450 | 400 |
| Total, New Mexico | 1,550 | 2,250 |
| Decrease | | 700 |
| Total, Rocky Mountain | 73,550 | 70,850 |
| Increase | | 2,700 |

### CALIFORNIA

| | | |
|---|---|---|
| Dominguez | 10,000 | 10,000 |
| Elwood-Goleta | 29,500 | 27,000 |
| Huntington Beach | 43,500 | 40,500 |
| Inglewood | 23,500 | 22,300 |
| Kettleman Hills | 3,400 | 3,400 |
| Long Beach | 176,500 | 174,000 |
| Midway-Sunset | 64,500 | 64,000 |
| Rosecrans | 6,300 | 5,300 |
| Santa Fe Springs | 255,500 | 246,500 |
| Seal Beach | 50,000 | 47,000 |
| Torrance | 13,000 | 13,000 |
| Ventura Avenue | 59,000 | 60,000 |
| Others | 125,800 | 122,500 |
| Total, California | 860,500 | 835,500 |
| Increase | | 25,000 |

### EASTERN

| | June 29 | June 22 |
|---|---|---|
| (Including Ill., Ind., Ky., Ohio, W. Va., Pa., and N. Y.) | 117,350 | 116,900 |
| Increase | | 450 |

# Compilation Of Mid-Continent Refinery Operations

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National Petroleum News

## Mid-Continent Refinery Operations Week Ended June 28 (By Telegraph)

| | Kansas | Oklahoma | North & Cent. Texas | West Texas | North La.-Ark. | Total Week Ended June 28 |
|---|---|---|---|---|---|---|
| Plants Reporting.... | 12 | 29 | 25 | 15 | 12 | 93 |
| Da. Av. Cap. (Bbls.). | 92,000 | 160,200 | 86,600 | 81,500 | 54,900 | 475,200 |
| Da. Cracking Capacity | 30,700 | 52,600 | 17,200 | 5,000 | 22,700 | 128,200 |
| Da. Av. Crude Runs.. | 70,665 + 8.6 | 122,777 + 12.2 | 66,722 — 2.7 | 51,096 — 0.3 | 60,935 — 13.5 | 372,195 + 2.1 |
| Da. Av. Other Oils... | 9,495 + 27.0 | 4,329 + 10.9 | 2,692 + 37.7 | 2,620 +138.8 | 1,637 + 65.0 | 20,773 + 36.7 |
| **GASOLINE—Gallons** | | | | | | |
| Stocks, June 21..... | 31,243,000 | 73,990,000 | 17,479,000 | 8,927,000 | 11,507,000 | 143,146,000 |
| Prod. 6-21 to 6-28.... | 11,306,000 + 8.9 | 18,890,000 + 8.9 | 8,629,000 — 0.7 | 4,012,000 — 2.8 | 5,541,000 — 8.7 | 48,378,000 + 3.8 |
| Ship. 6-21 to 6-28.... | 11,397,000 + 9.3 | 18,155,000 + 8.7 | 8,992,000 + 8.1 | 3,343,000 +127.1 | 4,463,000 — 25.3 | 46,350,000 + 8.3 |
| Stocks, June 28..... | 31,152,000 — 0.3 | 74,725,000 + 9.3 | 17,116,000 — 2.1 | 9,596,000 + 7.5 | 12,585,000 + 9.4 | 145,174,000 + 1.4 |
| Ratio Sales to Prod... | 100.8% | 96.1% | 104.2% | 83.3% | 75.6% | 95.8% |
| **KEROSENE—Gallons** | | | | | | |
| Stocks, June 21..... | 8,336,000 | 6,470,000 | 2,591,000 | 26,000 | 918,000 | 18,341,000 |
| Prod. 6-21 to 6-28.... | 2,423,000 + 4.5 | 2,343,000 + 3.9 | 1,533,000 — 3.5 | ..... .... | 373,000 + 13.7 | 6,672,000 + 2.8 |
| Ship. 6-21 to 6-28.... | 2,132,000 + 34.7 | 2,322,000 + 26.4 | 1,366,000 — 0.6 | 12,000 — 60.0 | 308,000 — 21.0 | 6,140,000 + 17.8 |
| Stocks, June 28..... | 8,627,000 + 3.5 | 6,491,000 + 0.3 | 2,758,000 + 6.4 | 14,000 — 46.2 | 983,000 + 7.1 | 18,873,000 + 2.9 |
| Ratio Sales to Prod... | 87.9% | 99.1% | 89.1% | ..... .... | 82.6% | 92.0% |
| **STOVE DISTILLATE—Gallons** | | | | | | |
| Stocks, June 21..... | 1,133,000 | 4,049,000 | 496,000 | 124,000 | 68,000 | 5,870,000 |
| Prod. 6-21 to 6-28.... | 164,000 + 50.5 | 470,000 — 92.6 | 171,000 — 12.8 | 123,000 + 36.6 | 103,000 + 24.1 | 1,031,000 — 7.2 |
| Ship. 6-21 to 6-28.... | 101,000 — 72.2 | 346,000 — 31.7 | 79,000 — 28.2 | 87,000 —123.0 | 96,000 + 31.5 | 709,000 + 59.4 |
| Stocks, June 28..... | 1,196,000 + 5.6 | 4,173,000 + 3.1 | 588,000 + 18.5 | 160,000 + 29.0 | 75,000 + 10.3 | 6,192,000 + 5.5 |
| Ratio Sales to Prod... | 61.6% | 73.6% | 46.1% | 70.7% | 93.2% | 68.7% |
| **GAS OIL—Gallons** | | | | | | |
| Stocks, June 21..... | 10,329,000 | 27,584,000 | 3,879,000 | 16,504,000 | 8,626,000 | 66,922,000 |
| Prod. 6-21 to 6-28.... | 2,006,000 + 16.4 | 2,574,000 + 3.0 | 1,678,000 + 31.1 | —64,000 .... | 2,384,000 — 18.3 | 8,578,000 — 1.1 |
| Ship. 6-21 to 6-28.... | 3,230,000 + 42.3 | 1,147,000 — 8.2 | 1,578,000 + 31.2 | 1,866,000 +110.8 | 3,401,000 + 41.1 | 11,222,000 + 3.7 |
| Stocks, June 28..... | 9,105,000 — 11.9 | 29,011,000 + 5.2 | 3,979,000 + 2.6 | 14,574,000 — 11.7 | 7,609,000 — 11.8 | 64,278,000 — 3.9 |
| Ratio Sales to Prod... | 161.0% | 44.6% | 94.0% | ..... .... | 142.7% | 130.8% |
| **FUEL OIL—Gallons** | | | | | | |
| Stocks, June 21..... | 14,538,000 | 59,466,000 | 51,158,000 | 34,168,000 | 31,913,000 | 191,243,000 |
| Prod. 6-21 to 6-28.... | 6,412,000 + 9.9 | 7,903,000 + 3.2 | 7,770,000 — 2.8 | 8,393,000 — 1.3 | 8,208,000 — 11.8 | 38,686,000 — 1.5 |
| Ship. 6-21 to 6-28.... | 5,865,000 — 1.9 | 6,586,000 — 11.4 | 6,363,000 + 8.0 | 8,336,000 + 15.6 | 11,512,000 + 51.3 | 38,662,000 + 13.3 |
| Stocks, June 28..... | 15,085,000 + 3.7 | 60,783,000 + 22.1 | 52,565,000 + 2.7 | 34,225,000 + 0.2 | 28,609,000 — 10.7 | 191,267,000 +0.01 |
| Ratio Sales to Prod... | 91.5% | 83.3% | 81.9% | 99.3% | 140.2% | 99.9% |

## Gasoline Produced by Various Methods, Week Ended June 28

| | Kansas | % of Total | Oklahoma | % of Total | North & Cent. Texas | % of Total | West Texas | % of Total | Louisiana-Arkansas | % of Total | Total | % of Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Straight Run..... | 7,294,000 | 64.5 | 12,535,000 | 66.3 | 6,586,000 | 76.2 | 3,741,000 | 93.2 | 1,989,000 | 35.9 | 32,145,000 | 66.4 |
| Cracked..... | 3,679,000 | 32.5 | 5,268,000 | 27.9 | 1,373,000 | 15.9 | 152,000 | 3.8 | 2,896,000 | 52.3 | 13,368,000 | 27.6 |
| Natural..... | 333,000 | 3.0 | 1,087,000 | 5.8 | 679,000 | 7.9 | 119,000 | 3.0 | 656,000 | 11.8 | 2,874,000 | 6.0 |
| Total..... | 11,306,000 | | 18,890,000 | | 8,638,000 | | 4,012,000 | | 5,541,000 | | 48,387,000 | |

**+ or — columns are % change over previous week.**

# Mid-Continent Gasoline Stocks Continue to Gain

TULSA, July 2
Staff Special—By Telegraph

THE 93 Mid-Continent refiners that report their operating statistics to NATIONAL PETROLEUM NEWS weekly, reported a continued increase in gasoline stocks in the week ended June 28. The rise was 2,000,000 gallons.

Crude oil runs to stills remained at a high level although shipments of gasoline have not been as large as refiners had expected. Shipments last week were 3,800,000 gallons more than in the preceding week.

The total shipments for the week were 46,350,000 gallons, 2,200,000 more than total shipments reported to NATIONAL PETROLEUM NEWS a year before but actually more than 1,000,000 gallons less because West Texas plants' shipments, which amounted to 3,343,000 gallons last week, were not included in last year's compilation.

## Summary for the Month

Production and shipments, all reporting refineries, for four weeks ended June 28. Change in stocks figured from May 31.

**GASOLINE**

| | Gallons |
|---|---|
| Production | 191,917,000 |
| Shipments | 185,887,000 |
| Net change in stocks | +6,030,000 |
| Ratio sales to production | 96.9% |

**KEROSENE**

| | Gallons |
|---|---|
| Production | 26,332,000 |
| Shipments | 25,287,000 |
| Net change in stocks | +1,045,000 |
| Ratio sales to production | 96.0% |

**STOVE DISTILLATE**

| | Gallons |
|---|---|
| Production | 4,598,000 |
| Shipments | 4,089,000 |
| Net change in stocks | +509,000 |
| Ratio sales to production | 88.9% |

**GAS OIL**

| | Gallons |
|---|---|
| Production | 33,109,000 |
| Shipments | 32,774,000 |
| Net change in stocks | +335,000 |
| Ratio sales to production | 99.0% |

**FUEL OIL**

| | Gallons |
|---|---|
| Production | 155,661,000 |
| Shipments | 145,952,000 |
| Net change in stocks | +9,709,000 |
| Ratio sales to production | 93.8% |

Crude runs for the field increased 7500 barrels daily average. Increases were made in Kansas and Oklahoma and decreases in the other districts. The higher crude charges resulted in an increase in gasoline production of 1,700,000 gallons. Production was increased in both Kansas and Oklahoma but decreased in the other districts.

Gasoline shipments increased in all districts except Louisiana-Arkansas. The increase was sufficient in Kansas for shipments to balance production while in North Texas stocks were reduced 500,000 gallons.

Reports for a year ago and for last week are not comparable due to inclusion of West Texas but figures for Kansas, Oklahoma, and Arkansas can be compared. For week ended June 29, 1928, gasoline production and shipments were almost 1,500,000 gallons less than last week's production and shipments. In Oklahoma production was 2,800,000 gallons less and shipments almost on a par. In Arkansas-Louisiana production was slightly less and shipments 1,300,000 gallons more.

Kerosene production increased less than 200,000 gallons while shipments increased almost 1,000,000 gallons. The shipment increase was noted in Kansas with a percentage of 34.7 and in Oklahoma with one of 26.4. Other districts showed a decrease in shipments.

Shipments failed to keep pace with production, however, and stocks were increased 500,000 gallons. A year ago stocks in the Mid-Continent totaled 14,707,000 gallons, Kansas stocks were 2,000,000 gallons less, Oklahoma stocks 600,000 gallons less, and Arkansas-Louisiana stocks 150,000 gallons less.

Stove distillate production was comparatively steady while shipments were off slightly. Stocks increased.

Gas oil stocks were reduced 2,600,000 gallons for the field as a whole. Production in Kansas increased 16.4 per cent and shipments increased 42.3 per cent, causing a draft on stocks of 1,200,000 gallons. Oklahoma refiners increased production 3 per cent but increased stocks 5.2 per cent. West Texas and Louisiana-Arkansas refiners reduced stocks 11.7 and 11.8 per cent, respectively.

Fuel oil production and shipments were on a par and stocks were unchanged.

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CLEVELAND, June 28.—Earl Coryell has signed a lease for 99 years on a quarter of a block at 14th and N streets, Lincoln, Neb., according to the current bulletin of the Nebraska Independent Oil Men's Association. The rental will approximate $1000 per month over the life of the contract.

Mr. Coryell plans to augment his present service facilities on the site by building a two story parking garage with a large basement. Complete car service will be offered.


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# Refinery - Tank Wagon Markets

National Petroleum News

# Mid-Continent Outlook Brightens as Holiday Gasoline Demand Nears

Staff Special

TULSA, June 29

THE buying lull which has hovered over the Mid-Continent for the past two or three weeks showed little signs of a break the last week in June. The week was one of the least active of the year as far as gasolines were concerned. A slight buying improvement was shown at the close as indicative of the fact that jobbers were coming back into the market at least temporarily.

Prices were lower in all districts for domestic gasolines. Exporters were not interested in the market.

A cargo of aviation grade of gasoline was sold by a natural gasoline company. Lower grades of naturals broke a full cent in price. Buying was extremely light for spot shipment.

Kerosenes were in only moderate demand. Distillates and gas oils were in normal demand for this season of the year. Fuel oils were steady as to demand and price with some inquiries for over July.

Bright stocks were more active. Stocks were extremely low in some quarters.

### Gasolines

Gasolines continued to lose ground in all areas of the Mid-Continent. The result was a wide range of quotations on a group 3 basis, and in some instances for differential territory shipment. Refining centers outside the Mid-Continent proper furnished stiff competition throughout the week.

Mid-Continent refiners usually look forward to the week preceding the July 4 holiday as one which will bring them a large volume of orders. The actual demand is seldom up to expectations, and the past week was no exception to the rule. Jobbers bought sparingly, despite the fact that some of them were known to be taking considerable gasoline from storage. The only ray of hope was a slight improvement in demand noted June 28 and 29.

A few refiners were anticipating a buying flurry either just before or immediately after the holiday. Just how good a volume of buying will be done remains to be seen. It will be recalled that the gasoline demand immediately after July 4 last year started gasolines on a rapid swing upward which resulted in an advance of almost 2 cents in the price of 58-60 U. S. Motor before the peak was reached.

On June 29, 1928, the price of U. S. Motor was slightly under 8 cents a gallon in Oklahoma. By July 6 the price had risen to around 8 cents and by July 27 had gone well above 9 cents a gallon. By the middle of August the price was just under 10 cents a gallon and remained there until late in October.

The majority of Oklahoma refiners quoted 9 to 9.25 cents for 58-60 U. S. Motor most of the past week. Some goods were available, however, from a few of the smaller refiners whose storage facilities were inadequate to handle any amount of gasoline. Virtually all the distress gasoline was offered by the small refiners. These offers were made at times with the price somewhat under the going market provided immediate instructions were furnished.

Some buying for delivery over July was reported, but jobbers apparently were not over anxious to buy ahead. A few sales were reported for shipment over July at prices ranging from 8.25 cents up.

Some spot sales of gasolines as low as 8.25 cents were reported late in the week, but a careful check indicated that in almost every instance this gasoline was not full specification U. S. Motor.

West Texas refiners had little success in moving their gasoline into competitive territories at prices anywhere near those reported from other districts. One refiner in that district said this week that it cost him 9 cents a gallon to make gasoline for which he was able to get only around 8.50 cents group 3, which gave him a net back of less than 8.25 cents. The crude advance in that district late in May apparently hit some of the refiners harder than was generally believed at the time.

North Texas refiners reported that shipping instructions for goods placed some time past by jobbers had picked up. These orders only helped to hold prices.

Higher gravity goods were in little demand. The trade expected Gulf prices to advance, but was disappointed. With no export orders to take out the goods refiners had to depend entirely on domestic demand which was light. This week was reported to have been one of the quietest this year.

Although Kansas refiners shared the quiet business with other territories, their prices were at last week's levels. They were also in good shape with future orders.

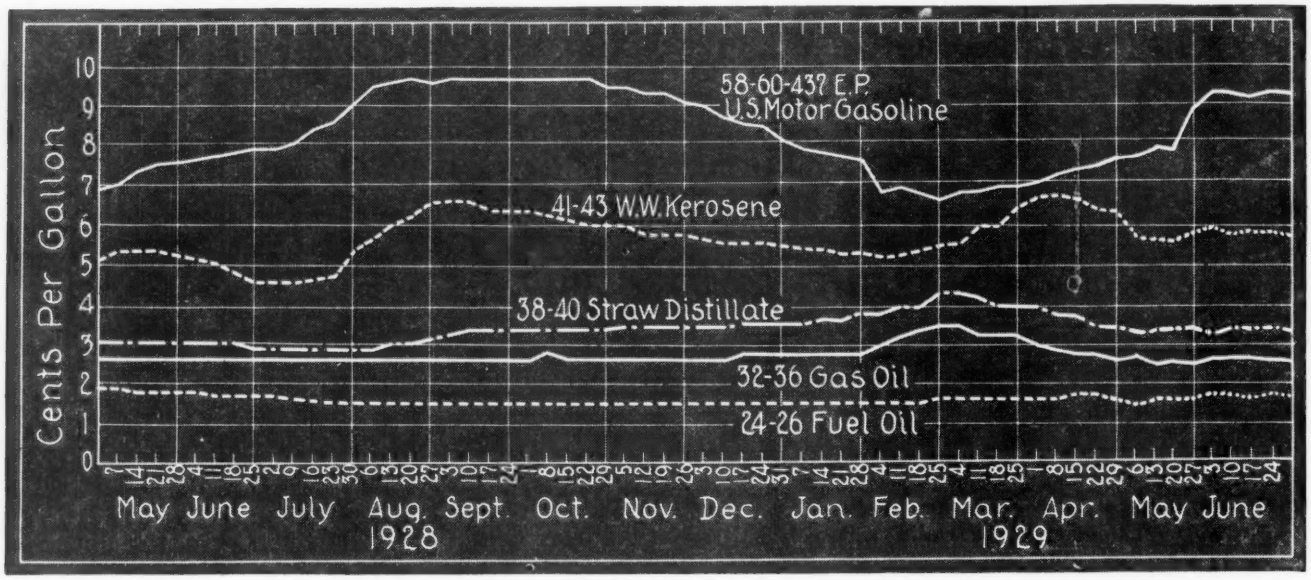
The majority of Arkansas and Louisiana refiners continued to move 58-60 U. S. Motor gasoline at 9.50 cents to surrounding territories with bulk of goods sold at 8.75 to 9 cents, group 3 basis. At least one Arkansas refiner sold goods ranging from 9.25 to 9.50 cents, claiming that the lower quotation was due to competition from other territories.

### Natural Gasolines

The fact that Phillips Petroleum Co. remained in the market for grade AA kept the price of that commodity from moving more than 0.125 to 0.25 cent lower than prices of a week ago.

Phillips Petroleum Co. incidentally completed the sale of a second cargo

# Current Prices of Principal Mid-Continent Refined Products




*Prices shown are on Group 3 basis and extended to date shown in Refinery Market Tables Section of this issue*

of their aviation grade of gasoline late in the week. The goods are already at a Gulf terminal and will be loaded about the middle of July. Price paid was not revealed. This makes the second full cargo of that grade of gasoline sold by the company within the past three weeks. Indications were the company was planning to enter the export business on a more extensive scale.

Lack of buying resulted in prices for grades BB and C dropping virtually a cent a gallon during the week. Manufacturers reported very little distress goods in the market but the inactivity of the market generally coupled with the light buying of refinery gasoline pushed prices downward. Another factor which aided in depressing prices was the relatively high production in the Seminole district, just at a time when demand was exceedingly light.

### Kerosenes

Kerosene prices showed only minor changes in most districts. Demand was light in some areas and fair in others. Kansas refiners reported rains the first of the week slowed up kerosene orders but that before the end of the week business had improved considerably.

The reduction in kerosene prices at the Gulf June 29 put the prices down to where exporters could not break even buying on the present market in Oklahoma and paying the freight and handling charges. That factor naturally will keep them from showing more than passing interest in kerosenes for the time being at least.

### Gas Oils Distillates, Fuel Oils

Some contracts were being made for distillates and gas oils for next season but spot buying was light in volume. It was about normal for this season of the year, however. Prices showed no changes.

Fuel oils were unchanged in price, and demand was good in most quarters. Inquiries were numerous for July shipment and quotations for over the month business were about in line with spot market quotations.

Bright stock was in active demand several refiners reported. One refiner said he would be behind on shipments for the next month to six weeks.

Prices of two grades of bright stocks moved up fractionally. One refiner who had been quoting 35 cents announced June 29 that his new price was 36 cents. The range for 150-160 vis. D color 210 June 29 was 36 to 37 cents a gallon.

## Tide Water Buys Two Tulsa Stations

TULSA, June 29.—The Tide Water Oil Sales Corp. has bought the two service stations in Tulsa of the Chastain Oil Co. and the property of the Gray Eagle Oil Co. at Muskogee, according to announcements made public at the company's offices here. The Chastain stations are located at Second street and Elgin avenue, and Fourth street and Detroit avenue.

The Tide Water some months ago acquired a number of bulk plants and service stations serving the southwest quarter of Missouri. The acquisition of the Muskogee company gives the Tide Water corporation an almost unbroken chain of bulk and service stations from Tulsa east to south central Missouri, through the Ozark mountains region.

### *Prices 10 Years Ago*

Prices of principal refined products, Chicago tank wagon and crude 10 years ago (June 30, 1919), were:

**Oklahoma:** 58-60 U. S. Motor, 18.25-18.50c; 80-84 Natural gasoline, 23.50c; 41-43 w.w. kerosene, 8.75-9c; 24-26 fuel oil, $0.80 per barrel.

**Pennsylvania:** 58-60 U. S. Motor, 20.50-20.75c; 47 w.w. kerosene, 10.75-11.00c; 38-40 fuel oil, 4.25-4.75c.

**Tank wagon:** Chicago, 20.50c.

**Crude:** Mid-Continent, 35-35.9 gravity, $2.25; Pennsylvania, $4.

### *Prices A Year Ago*

Prices of principal refined products, Chicago tank wagon and crude, a year ago (July 2, 1928), were:

**Oklahoma:** 58-60 U. S. Motor, 7.9493c; Grade A natural, 6.50-6.625c; 41-43 kerosene, 4.50-4.75c; 24-26 fuel oil, $0.70-$0.75 per barrel.

**Pennsylvania:** 58-60 U. S. Motor, 10.50-11.00c; 47 w.w. kerosene, 6.875-7.25c; 36-40 fuel oil, 4.75-5.00c.

**Tank wagon:** Chicago 14c.

**Crude:** Mid-Continent 35-35.9 gravity, $1.25; Pennsylvania, $2.90.

# Chicago Resale Market

## Gasoline Price Ranges Widen Further

Staff Special
CHICAGO, June 29

IN SPITE of continued good motoring weather over Standard of Indiana territory, sellers in the Chicago market failed to experience a very heavy demand for gasoline in the week ended June 29. Refiners reported their movement of contract goods was satisfactory but the spot demand was only fair, although buying increased on June 28 and 29. One refiner reported selling several cars of U. S. Motor to a customer who was in the market for the first time since the last of May.

One large distributor, with service stations throughout Standard of Indiana territory, reported sales so far this year were almost 16 per cent ahead of the first six months of 1929. Nearly all distributors reported a heavier gallonage this year and these reports, together with the fact that the 4th of July comes next week led most of the trade to believe that jobbers would be active in the spot gasoline market before the week was over.

Gasoline prices continued to show a wide range with a spread of over 1 cent reported. The major Oklahoma refiners made no change in their quotations and were still quoting 9.25 cents for U. S. Motor gasoline. Other Oklahoma refiners reported sales as low as 8.625 cents and carlot marketers offered Oklahoma goods generally at 8.50 cents. However, some sales of Oklahoma gasoline were reported as low as 8.25 cents.

The bulk of the low prices gasoline offered in Chicago apparently was coming from north and west Texas. Carlot marketers reported offers of U. S. Motor from these sources at 8 cents, Group 3 basis, and goods were freely available to the jobbing trade at 8.25 cents, Group 3. There was considerable speculation as to the amount of gasoline available at these low prices and many of the trade expressed the opinion that 150 to 200 cars bought at one time would take these goods off the market.

The bulk of sales of U. S. Motor gasoline in Chicago were at 8.50 to 9.25 cents on June 24 and 25 and at 8.25 to 9.25 cents thereafter.

Jobbers continued to inquire for gasolines for July shipment but there were few sales reported. Most sellers were unable to decide on a safe price for this period due to the unsettled condition of the market. One carlot marketer reported an offer of U. S. Motor for July delivery at 8.25 cents.

The higher gravity gasoline enjoyed a fair demand but prices were off 0.125 to 0.375 cents in line with U. S. Motor. The 60-62, 437 e.p. moved at 8.75 to 9.375 cents June 24 and 25 and at 8.625 to 9.375 cents thereafter. Sales of 60-62, 400 e.p. were mostly at 8.875 to 9.50 cents after June 26 and at 9 to 9.50 cents previously. The 64-66, 375 e.p. gasoline moved at 9.50 to 9.75 cents June 24; at 9.375 to 9.75 cents June 25 and at 9.125 to 9.75 cents thereafter.

Kerosene demand was characterized as "spotty" by most sellers. There were occasional orders in the market but in general there was little steady buying. While there was no pronounced move toward lower kerosene prices there was more 41-43 w.w. goods available at 5.50 cents on June 29 than had previously been the case. The bulk of sales of this grade were at 5.625 to 5.875 cents most of the week and closed June 29 at 5.50 to 5.75 cents.

The greater portion of the gas oil demand in the Chicago market continued to come from industrial companies. Practically all of them were taking out their normal commitments and there was no unusual amount of buying. Prices were maintaining the same levels that have prevailed for several weeks.

Little change was apparent in distillates and fuel oils. Demand continued steady with no price changes reported over those shown in the June 26 issue of NATIONAL PETROLEUM NEWS.

Moderate temperatures will prevail generally throughout Standard of Indiana territory next week. There will probably be shower periods during the middle and closing days.

---

### Gulf Lubes Continue Strong

HOUSTON, July 1.—The strength recently manifested in Gulf Coastal lubricant markets continued throughout the past week. There has been no further change in prices which stiffened about the middle of June. Manufacturers attribute the increased domestic jobber demand to the summer motoring season.

En-ar-co
MOTOR OIL
White Rose
GASOLINE

YOU will make money if you handle these nationally advertised brands.

All grades of lubricating oils and greases.

The National Refining Co.
Cleveland, Ohio

DRUMS

*—that don't leak*
*—that stay tight*
*—that are economical to use*

are BENETCO steel drums. Available in all standard sizes.

The coupon will bring you illustrated literature. Mail it today!

Wilson & Bennett Mfg. Co.

——————COUPON——————

Wilson & Bennett Mfg. Co.,
6520 So. Menard Ave., Chicago, Ill.

Please send detailed literature of your steel drums.

Name.....

Address.....

.....

# Refinery Markets on Light Oils and Lubricants

**Prices given below are in cents per gallon, F. O. B. refinery except where $ is shown**

***(These Refinery Prices compiled in the OIL PRICE HANDBOOK for a whole year)***

## Comparative Prices of 58-60 U. S. Motor Gasoline, 437 E. P., Group 3 and Point of Origin, to Jobbers Only

In Effect July 1

| | *Price F.O.B. Group 3* | *Price F.O.B. Point of Origin* | *If for Particular Destination* |
|---|---|---|---|
| Oklahoma | 9.2222 (Wt. Avg.) | 9.2222 (Wt. Avg.) | |
| Kansas | 8.75-9.25 | | S. O. Neb. & Ind. Ter., etc. |
| Kansas | | 9.4974 (Wt. Avg.) | Kansas only. |
| North Texas | 8.25-8.75 | 8.25-8.75 | |
| West Texas | 8.50-9.00 | 8.375-8.75 | |
| Louisiana-Ark. | 8.75-9.25 | | Mich., Ohio & Indiana. |
| Louisiana-Ark. | | 9.50 | State or differential haul. |
| Indiana-Illinois | 9.25 | * | S. O. Ind. territory except Detroit and vicinity. For Ohio on delivered basis only. |

*Shipments made from E. Chicago, Ind., and Wood River, Ill., according to conditions and freight rates; no prices F.O.B. point of origin can be given.

## Weighted Average Prices

### OKLAHOMA

| | July 1 | | June 24 | | June 17 | |
|---|---|---|---|---|---|---|
| | No. of cars | Price | No. of cars | Price | No. of cars | Price |
| 58-60 U. S. Motor, 437 e. p. | 81 | 9.2222 | 78 | 9.1859 | 56 | 9.2366 |
| 60-62 437 e. p. gasoline | No sales | reported | 3 | 9.4167 | 2 | 9.4375 |
| 60-62 400 e. p. gasoline | 2 | 9.2500 | 1 | 9.5000 | 1 | 9.5000 |
| 64-66 375 e. p. gasoline | 1 | 9.7500 | No sales | reported | No sales | reported |

The relatively small volume of gasoline moving out of Oklahoma as shown in the above figures is accounted for largely by competition from other areas, although exceptionally quiet spot demand in the entire Mid-Continent accounts for it in a measure.

The steadiness of the weighted averages more or less verifies the reported reluctance of Oklahoma refiners to meet the outside competition.

### KANSAS

| | July 1 | | June 24 | | June 17 | |
|---|---|---|---|---|---|---|
| | No. of cars | Price | No. of cars | Price | No. of cars | Price |
| 58-60 U. S. Motor, 437 e. p. | 49 | 9.4974 | 16 | 9.4844 | 22 | 9.4943 |

For shipment within the State, Kansas refiners continued to maintain the usual differential over Group 3 as evidenced by the above weighted average prices. Some deviations from the 9.50 cent price were brought about by efforts to get immediate shipping instructions.

## GASOLINE AND NAPHTHA

### OKLAHOMA

| | Prices July 1 | Prices June 24 | Prices June 17 |
|---|---|---|---|
| 48-50 450 e.p. naphtha | 8.75 – 9.00 | 8.75 – 9.00 | 8.75 – 9.00 |
| 50-52 450 e.p. naphtha | 8.75 – 9.00 | 8.75 – 9.00 | 8.75 – 9.00 |
| 56-58 450 e.p. gasoline | 8.50 – 8.75 | 8.75 | 8.75 – 8.875 |
| 58-60 450 e.p. gasoline | 8.625– 8.875 | 8.875 | 8.875– 9.00 |
| 64-66 390 e.p. gasoline | 9.50 | 9.625 | 9.625– 9.875 |
| 68-70 350-360 e.p. gasoline | 9.625–10.00 | 9.875–10.00 | 9.875–10.00 |

†Prices nominal ††Only one refiner quoting *Quotations only

### PENNSYLVANIA

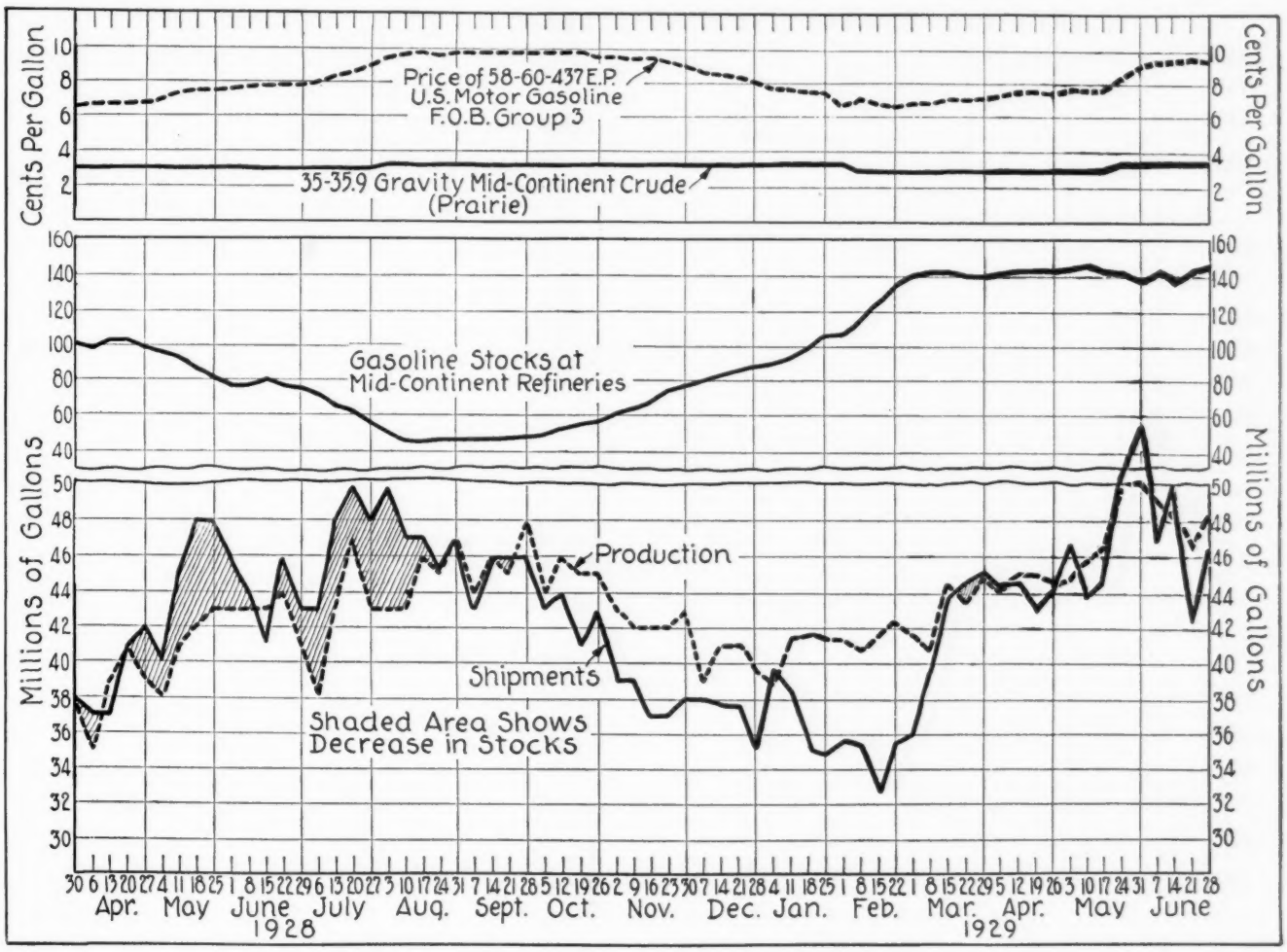
| | Prices July 1 | Prices June 24 | Prices June 17 |
|---|---|---|---|
| 52-54 Naphtha | 9.50 –10.00 | 9.50 –10.00 | 9.50 –10.00 |
| 54-56 Naphtha | 9.50 –10.25 | 9.50 –10.25 | 9.50 –10.25 |
| 58-60 U.S. Motor 437 e.p. | 10.25 –10.75 | 10.25 –10.75 | 10.25 –10.50 |
| 60-62 400-410 e.p. gasoline | 10.50 –11.00 | 10.50 –11.00 | 10.50 –11.00 |
| 64-66 390 e.p. gasoline | 10.75 –11.50 | 10.75 –11.50 | 10.75 –11.50 |
| 68-70 Str-run gas 350-360 e.p. | 11.50 –12.50 | 11.50 –12.50 | 11.50 –12.50 |

*(Continued on Page 114)*

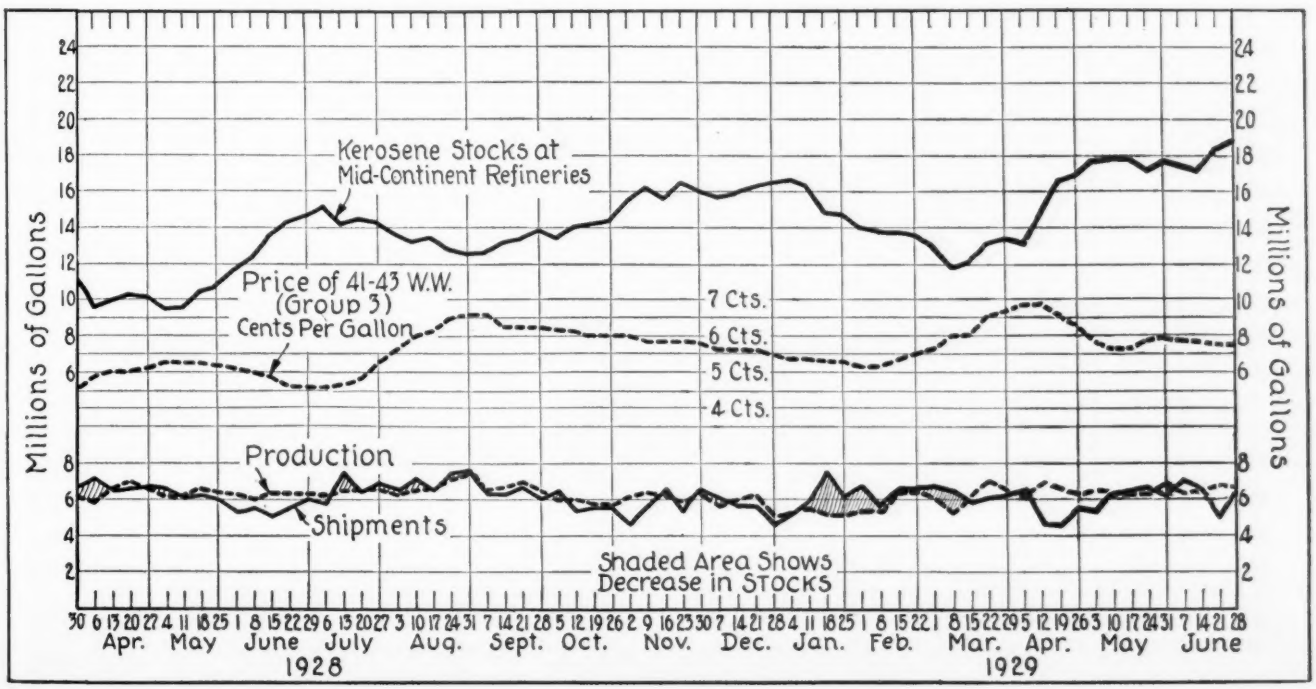
**Represents Both Sales and Quotations.

# Barometer of Mid-Continent Refinery Market—Week Ending June 28

***Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 93 Plants to National Petroleum News***


Cents Per Gallon
Price of 58-60-437 E.P. U.S. Motor Gasoline F.O.B. Group 3
35-35.9 Gravity Mid-Continent Crude (Prairie)
Gasoline Stocks at Mid-Continent Refineries
Millions of Gallons
Production
Shipments
Shaded Area Shows Decrease in Stocks
Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June
1928
1929

***Prices shown above are extended to date shown in Refinery Market and Crude tables in Market section of this issue and stocks, shipments and Production are extended to date as shown in the table on page 106.***



# Refinery Markets on Light Oils and Lubricants

Prices given below are in cents per gallon, F. O. B. refinery except where $ is shown

*(These Refinery Prices compiled in the OIL PRICE HANDBOOK for a whole year)*

**OHIO (Quotations of S. O. Ohio. 4c state tax to be added.)**

| U. S. Motor Gasoline | Prices July 1 | Prices June 24 | Prices June 17 |
|---|---|---|---|
| Ohio, delivery at any point | 12.00 | 12 00 | 12.00 |

**KANSAS (F. O. B. refinery Kansas destination)**

| | | | |
|---|---|---|---|
| 60-62 400 e.p. gasoline | 9.75 –10.00 | 9.75 –10.25 | 10.00 –10.25 |
| 64-66 375 e.p. gasoline | 10.00 –10.25 | 10.00 –10.375 | 10.00 –10.375 |

**NORTH TEXAS**

| | | | |
|---|---|---|---|
| 48-52 450 e.p. naphtha | 8.25 – 8.50 | 8.375– 8.50 | 8.50 – 8.625 |
| 56-58 450 e.p. gasoline | 8.25 – 8.50 | 8.375– 8.50 | 8.50 – 8.625 |
| 58-60 450 e.p. gasoline | 8.25 – 8.50 | 8.375– 8.50 | 8.50 – 8.625 |
| 58-60 U.S. Motor 437 e.p. | 8.25 – 8.75 | 8.50 – 8.75 | 8.50 – 8.75 |
| 60-62 400 e.p. gasoline | 9.00 – 9.125 | 9.25 – 9.375 | 9.25 – 9.375 |
| 64-66 390 e.p. gasoline | 9.00 – 9.375 | 9.50 | 9.50 |
| 64-66 375 e.p. gasoline | 9.375– 9.50 | 9.50 – 9.625 | 9.50 – 9.625 |
| 68-70 350-360 e.p. gasoline | 9.50 – 9.75 | 9.625– 9.75 | 9.625– 9.75 |

****WEST TEXAS (F.o.b. West Texas refinery, for unrestricted shipment)**

| | | | |
|---|---|---|---|
| 50-52 naphtha | 8.00 | 8.00 | 8.25 – 8.50 |
| 56-58 437 e.p. gasoline | 8.00 – 8.375 | 8.50 | 8.75 |
| 58-60 437 e.p. gasoline | 8.375– 8.75 | 8.50 – 8.625 | 8.75 – 9.00 |

**NORTH LOUISIANA (N. La., Ark., and Miss. destination)**

| | | | |
|---|---|---|---|
| 58-60 U.S. Motor, 437 e.p | 9.50 | 9.50 | 9.50 |

**ARKANSAS (Ark., N. La. and Miss. destination)**

| | | | |
|---|---|---|---|
| 58-60 U.S. Motor 437 e.p. | 9.50 | 9.25 – 9.50 | 9.50 |
| 61-63 390 e.p. gasoline | 9.625 | 9.625 | 9.625 |

**CALIFORNIA (3c tax to be added to California gasoline prices if used in state.)**

| | | | |
|---|---|---|---|
| 54-58 U.S. Motor 437 e.p. | 8.00 –10.00 | 8.00 –10.50 | 8.00 –10.00 |
| 58-61 375-400 e.p. gasoline | 9.00 –11.00 | 9.00 –11.00 | 9.00 –10.50 |
| 62-45 Eng. dis. 445-480 e.p. | 7.00 – 8.50 | 7.00 – 8.50 | 7.00 – 8.50 |

## NATURAL GASOLINE

(Note: End point of all grades, not over 375 F. Corrosion test adopted Oct. 1, 1927; A.S.T.M. Method D130-27T; doctor test, July 2, 1928.)

**OKLAHOMA**

| | | | |
|---|---|---|---|
| Grade AA, 80-87.9, 90% Recovery | 7.25 – 7.375 | 7.375– 7.50 | 7.50 |
| Grade A, 72-79.9, 90% Recovery | 7.25 – 7.375 | 7.375– 7.50 | 7.50 |
| Grade BB, 84-92, 85% Recovery | 6.25 | 6.625– 6.75 | 7.00 – 7.25 |
| Grade B, 76-83.9, 85% Recovery | 6.25 | 6.625– 6.75 | 7.00 – 7.25 |
| Grade C, 80-90, 78% Recovery | 6.25 | 6.625– 6.75 | 7.00 – 7.25 |

**NORTH TEXAS (F. O. B. Breckenridge)**

| | | | |
|---|---|---|---|
| Grade AA, 80-87.9, 90% Recovery | 7.25 – 7.375 | 7.375– 7.50 | 7.50 |
| Grade A, 72-79.9, 90% Recovery | 7.25 – 7.375 | 7.375– 7.50 | 7.50 |
| Grade BB, 84-92, 85% Recovery | 6.25 | 6.625– 6.75 | 7.00 – 7.25 |
| Grade B, 76-83.9, 85% Recovery | 6.25 | 6.625– 6.75 | 7.00 – 7.25 |
| Grade C, 80-90, 78% Recovery | 6.25 | 6.625– 6.75 | 7.00 – 7.25 |

**NORTH LOUISIANA (F. O. B. Monroe District)**

| | | | |
|---|---|---|---|
| Grade AA | †7.50 | †7.75 | †8.00 |
| Grade BB | †6.50 | †7.00 | †7.375 |
| Grade C | †6.50 | †7.00 | †7.375 |

**CALIFORNIA**

| | | | |
|---|---|---|---|
| 75-85, 375-390 e.p. blend | 8.50 – 9.00 | 9.00 – 9.50 | 9.00 – 9.50 |

## BURNING OILS

**PENNSYLVANIA**

| | Prices July 1 | Prices June 24 | Prices June 17 |
|---|---|---|---|
| 45 w.w. kerosene | 6.375– 6.75 | 6.625– 6.875 | 6.625– 7.00 |
| 46 w.w. kerosene | 6.75 – 7.00 | 6.875– 7.25 | 6.875– 7.25 |
| 47 w.w. kerosene | 7.125– 7.50 | 7.25 – 7.50 | 7.25 – 7.75 |
| 300 mineral seal | 7.50 – 7.75 | 7.50 – 7.75 | 7.50 – 7.75 |

**OKLAHOMA**

| | | | |
|---|---|---|---|
| 41-43 w.w. kerosene | 5.625– 5.875 | 5.75 – 6.00 | 5.75 – 6.00 |
| 42-44 w.w. kerosene | 6.25 – 6.375 | 6.25 – 6.50 | 6.25 – 6.50 |

**KANSAS (F. O. B. refinery Kansas destination)**

| | | | |
|---|---|---|---|
| 41-43 w.w. kerosene | 6.25 – 6.50 | 6.25 – 6.50 | 6.125– 6.375 |
| 42-44 w.w. kerosene | 6.75 | 6.625– 6.75 | 6.625– 6.75 |

**NORTH TEXAS**

| | | | |
|---|---|---|---|
| 40-42 w.w. kerosene | 5.375 | 5.375 | 5.375 |
| 41-43 w.w. kerosene | 5.375– 5.50 | 5.50 | 5.50 – 5.75 |

**NORTH LOUISIANA (N. La., Ark. and Miss. destination)**

| | | | |
|---|---|---|---|
| 41-43 w.w. kerosene | 6.25 – 6.50 | 6.25 – 6.50 | 6.00 – 6.50 |
| 42-44 w.w. kerosene | 6.75 | ..... | ..... |

**ARKANSAS (Ark., N. La. and Miss. destination)**

| | | | |
|---|---|---|---|
| 41-43 kerosene | 6.25 – 6.50 | 6.25 – 6.50 | 6.00 – 6.50 |
| 42-44 kerosene | 6.75 | 6.75 | 6.75 |

**CALIFORNIA**

| | | | |
|---|---|---|---|
| 38-40 w.w. kerosene | 5.50 – 6.50 | 5.50 – 6.50 | 5.50 – 6.50 |

## NEUTRAL OIL

**PENNSYLVANIA**

| Vis. | (Viscosity at 70°F.) | | |
|---|---|---|---|
| 200 No. 3 Assoc. Filt. | 28.00 –29.50 | 28.50 –29.50 | 28.50 –29.50 |
| 180 No. 3 Assoc. Filt. | 25.00 –27.00 | 25.00 –27.00 | 25.00 –27.00 |
| 150 No. 3 Assoc. Filt. | 20.50 –21.50 | 21.00 –21.50 | 21.00 –22.00 |
| | **(Non Viscous)** | | |
| 34 Grav. 330-340 Flash | 7.50 – 8.00 | 7.50 – 8.00 | 7.50 – 8.00 |

****OKLAHOMA**

| Vis. Color | (Viscosity at 100°F.) | | |
|---|---|---|---|
| 100—No. 2 | 6.00 – 7.00 | 6.00 – 7.00 | 6.00 – 7.00 |
| 150—No. 3 | 7.50 – 8.25 | 7.50 – 8.25 | 7.50 – 8.25 |
| 150—No. 4 | 6.75 – 7.50 | 6.75 – 7.50 | 6.75 – 7.50 |
| 180—No. 3 | 9.00 – 9.50 | 9.00 – 9.50 | 9.00 – 9.50 |
| 180—No. 4 | 8.75 – 9.25 | 8.75 – 9.25 | 8.75 – 9.25 |
| 180—No. 5 | 8.50 – 9.00 | 8.50 – 9.00 | 8.50 – 9.00 |
| 200—No. 3 | 9.50 –11.00 | 9.50 –11.00 | 9.50 –11.00 |
| 200—No. 4 | 9.00 –10.25 | 9.00 –10.25 | 9.00 –10.25 |
| 200—No. 5 | 8.75 – 9.50 | 8.75 – 9.50 | 8.75 – 9.50 |
| 220—No. 3 | 12.50 –13.50 | 12.50 –13.50 | 12.50 –13.50 |
| 220—No. 4 | 12.25 –12.50 | 12.25 –12.50 | 12.25 –12.50 |
| 220—No. 5 | 11.50 –12.00 | 11.50 –12.00 | 11.50 –12.00 |
| 240—No. 3 | 13.00 –13.50 | 13.00 –13.50 | 13.00 –13.50 |
| 240—No. 4 | 12.00 –13.00 | 12.00 –13.00 | 12.00 –13.00 |
| 240—No. 5 | 11.00 –13.00 | 11.00 –13.00 | 11.00 –13.00 |
| 280—No. 3 | 14.00 –16.00 | 14.00 –16.00 | 14.00 –16.00 |
| 280—No. 4 | 13.00 –15.00 | 13.00 –15.00 | 13.00 –15.00 |
| 280—No. 5 | 12.00 –14.00 | 12.00 –14.00 | 12.00 –14.00 |
| 300—No. 5-6 | 16.00 –17.00 | 16.00 –17.00 | 16.00 –17.00 |

**†Prices nominal ††Only one refiner quoting *Quotations only **Represents both sales and quotations.**

# Refinery Markets Wax, Lubricants, Heavy Oil

Prices given below are in cents per gallon, F. O. B. refinery except where $ is shown

*(For quick reference to Refinery Prices, get the OIL PRICE HANDBOOK, published annually)*

### GULF COASTAL

| Vis. | Color | Prices July 1 | Prices June 24 | Prices June 17 |
|---|---|---|---|---|
| | | (Viscosity at 100°F., pour test 0) | | |
| 100 | No. 2 Pale | 6.75 – 7.25 | 6.75 – 7.25 | 6.50 – 7.00 |
| 200 | No. 3 Pale | 9.25 – 9.75 | 9.25 – 9.75 | 9.00 – 9.50 |
| 300 | No. 3 Pale | 10.50 –11.00 | 10.50 –11.00 | 10.25 –10.75 |
| 500 | No. 3½ Pale | 12.00 –12.50 | 12.00 –12.50 | 12.00 –12.50 |
| 750 | No. 4 Pale | 13.25 –13.75 | 13.25 –13.75 | 13.25 –13.75 |
| 200 | No. 5½ Red Oil | 8.50 – 9.00 | 8.50 – 9.00 | 8.25 – 8.75 |
| 300 | No. 5½ Red Oil | 9.75 –10.25 | 9.75 –10.25 | 9.50 –10.00 |
| 500 | No. 6 Red Oil | 11.00 –11.50 | 11.00 –11.50 | 11.00 –11.50 |
| 750 | No. 6 Red Oil | 12.00 –12.50 | 12.00 –12.50 | 12.00 –12.50 |

### CALIFORNIA

| Vis. | Color | | | |
|---|---|---|---|---|
| | | (Viscosity at 100°F.) | | |
| 100 | No. 3 | 9.50 –10.00 | 9.50 –10.00 | 9.50 –10.00 |
| 200 | No. 3 | 11.50 | 11.50 | 11.50 |
| 300 | No. 3 | 13.00 | 13.00 | 13.00 |
| 450 | No. 3 | 15.50 | 15.50 | 15.50 |
| 550 | No. 3 | 16.50 | 16.50 | 16.50 |
| 600 | No. 3 | 17.00 | 17.00 | 17.00 |
| 200 | No. 5 | 11.00 | 11.00 | 11.00 |
| 300 | No. 5 | 12.00 | 12.00 | 12.00 |
| 400 | No. 5 | 14.00 | 14.00 | 14.00 |
| 500 | No. 5 | 15.00 | 15.00 | 15.00 |
| 600 | No. 5 | 16.00 | 16.00 | 16.00 |
| 700 | No. 7 | 18.00 | 18.00 | 18.00 |

## CYLINDER STOCKS

### **OKLAHOMA

| | | | |
|---|---|---|---|
| 190-200D Vis. at 210° Brt. St. | 37.00 –41.00 | 37.00 –40.00 | 37.00 –40.00 |
| 150-160D Vis. at 210° Brt. St. | 36.00 –37.00 | 35.00 –37.00 | 35.00 –37.00 |
| 150-160E Vis. 210° Brt. St. | 29.00 –33.00 | 29.00 –33.00 | 29.00 –33.00 |
| 600 St. Ref. Olive Green | 15.00 –20.00 | 15.00 –20.00 | 15.00 –20.00 |
| 600 St. Ref. Dark Green | 13.50 –16.00 | 13.50 –16.00 | 13.50 –16.00 |
| Black Oil | 5.00 | 5.00 | 5.00 |

### PENNSYLVANIA (A. S. T. M. Tests)

| | | | |
|---|---|---|---|
| 600 Steam Refined, filterable | 28.00 –31.00 | 30.00 –32.00 | 31.00 –33.50 |
| 650 Steam Refined | 37.00 –39.00 | 37.50 –39.00 | 38.50 –39.00 |
| 600 Flash | 41.00 –43.00 | 41.00 –43.00 | 42.00 –43.00 |
| 625 Flash | 44.00 –45.00 | 44.00 –45.00 | 45.00 |
| 600 Warren E | 36.50 –37.00 | 36.50 –37.00 | 36.50 –37.00 |
| 600 Oil City E | 35.50 –36.00 | 35.50 –36.00 | 35.50 –36.00 |
| 600 D Filtered | 40.00 –41.00 | 40.00 –41.00 | 40.00 –41.00 |
| Cold Test Stock, 40-50 p. p., 140-150 vis. at 21° 540-550 flash, No. 8 color | 53.00 –55.00 | 53.00 –55.00 | 53.00 –55.00 |
| 40-50 p.p., 140-150 v s. at 210°, 540-550 flash, No 6-6½ color diluted | 51.00 –52.00 | 51.00 –52.00 | 51.00 –52.00 |

## WAX

### PENNSYLVANIA Per pound, New York

| | | | |
|---|---|---|---|
| 122-124 white crude scale a. m. p. | 2.625– 2.875 | 2.75 – 2.875 | 2.75 – 2.875 |
| 124-126 white crude scale, a. m. p. | 2.75 – 3.00 | 2.75 – 3.00 | 2.75 – 3.00 |

### OKLAHOMA

| | | | |
|---|---|---|---|
| **124-126 White Crude Scale, a. m. p. | 2.50 – 2.625 | 2.50 | 2.50 – 2.625 |

### CALIFORNIA

| | | | |
|---|---|---|---|
| White crude scale, per pound, ton lots, a. m. p. | 6.00 – 6.50 | 6.00 – 6.50 | 6.00 – 6.50 |

## FUEL OIL

### PENNSYLVANIA (For outside Pittsburgh district)

| | Prices July 1 | Prices June 24 | Prices June 17 |
|---|---|---|---|
| 36-40 fuel oil | 4.625– 5.00 | 4.75 – 5.00 | 4.75 – 5.375 |
| 30-34 fuel oil | 4.375– 4.50 | 4.50 – 4.625 | 4.50 – 4.625 |
| 28-32 fuel oil | 4.375– 4.50 | 4.50 – 4.625 | 4.50 – 4.625 |

### OKLAHOMA

| | | | |
|---|---|---|---|
| 38-40 straw distillate | †3.25 – 3.50 | †3.25 – 3.50 | †3.25 – 3.50 |
| 36-38 straw distillate | †3.125– 3.25 | †3.125– 3.25 | †3.125– 3.25 |
| 32-36 straw gas oil | 2.50 – 2.625 | 2.50 – 2.625 | 2.50 – 2.75 |
| 32-36 dark gas oil | 2.375– 2.50 | 2.375– 2.50 | 2.375– 2.50 |
| 32-36 straw zero gas oil | 2.625– 2.75 | 2.625– 2.75 | 2.625– 2.75 |
| 28-30 zero fuel oil | $0.90 – 0.95 | $0.90 – 0.95 | $0.90 – 0.95 |
| 28-30 fuel oil (in bbls.) | $0.875– 0.95 | $0.875– 0.95 | $0.875– 0.95 |
| 26-28 fuel oil (in bbls.) | $0.75 – 0.80 | $0.75 – 0.775 | $0.70 – 0.80 |
| 24-26 fuel oil (in bbls.) | $0.675– 0.75 | $0.675– 0.75 | $0.675– 0.75 |
| 22-26 fuel oil (in bbls.) | $0.60 – 0.625 | $0.60 – 0.625 | $0.60 – 0.625 |
| 18-22 fuel oil (in bbls.) | $0.50 – 0.55 | $0.50 – 0.55 | $0.50 – 0.575 |
| 16-18 fuel oil (in bbls.) | $0.45 – 0.50 | $0.45 – 0.50 | $0.45 – 0.55 |
| 14-16 fuel oil (in bbls.) | $0.45 – 0.50 | $0.45 – 0.50 | $0.45 – 0.50 |

### KANSAS (F. O. B. refinery Kansas destination)

| | | | |
|---|---|---|---|
| 38-40 straw distillate | 3.375– 3.625 | 3.375– 3.50 | 3.375– 3.50 |
| 36-38 straw distillate | 3.25 – 3.375 | 3.25 – 3.375 | 3.25 – 3.375 |
| 32-36 gas oil | 2.50 – 2.75 | 2.50 – 2.75 | 2.50 – 2.75 |
| 24-26 fuel oil | $0.70 – 0.75 | $0.70 – 0.75 | $0.70 – 0.75 |
| 18-22 fuel oil | $0.625– 0.70 | $0.625– 0.70 | $0.625– 0.70 |
| 10-14 fuel oil | $0.50 – 0.575 | $0.50 – 0.575 | $0.525–$0.575 |

### NORTH TEXAS

| | | | |
|---|---|---|---|
| 38-40 straw distillate | 3.25 – 3.375 | 3.25 – 3.375 | 3.25 – 3.375 |
| 32-36 gas oil, cracked | 2.25 – 2.375 | 2.25 – 2.375 | 2.25 – 2.375 |
| 32-36 St. reduced gas oil | 2.375– 2.50 | 2.375– 2.50 | $2.375– 2.50 |
| 24-26 fuel oil (in bbls.) | $0.625– 0.70 | $0.625– 0.70 | $0.625– 0.70 |
| 20-24 fuel oil | $0.625– 0.70 | $0.625– 0.70 | $0.625– 0.70 |

### **WEST TEXAS (F.o.b. West Texas refinery, for unrestricted shipment)

| | | | |
|---|---|---|---|
| 34-38 gas oil | 2.375– 2.50 | 2.375– 2.50 | 2.375– 2.50 |
| 30-32 gas oil | 2.25 | 2.125– 2.25 | 2.125– 2.25 |
| 18-22 fuel oil | $0.375– 0.45 | $0.375– 0.45 | $0.375– 0.45 |

### NORTH LOUISIANA (N. La., Ark. and Miss. destination)

| | | | |
|---|---|---|---|
| 32-36 gas oil, dark | 2.625– 3.00 | 2.75 – 3.00 | 2.75 – 3.00 |
| 32-36 gas oil, straw | 2.75 – 3.00 | 2.75 – 3.00 | 2.75 – 3.00 |
| 14-16 fuel oil (in bbls.) | $0.75 – 0.80 | $0.75 – 0.80 | $0.75 – 0.80 |

### ARKANSAS (Ark., N. La. and Miss. destination)

| | | | |
|---|---|---|---|
| 32-36 gas oil, straw | 3.00 | 3.00 | 3.00 – 3.25 |
| 32-36 gas oil | 3.00 | 3.00 | 3.00 – 3.25 |
| 28-30 gas oil | 2.625– 2.75 | 2.75 | 2.75 |
| 14-16 fuel oil | $0.75 – 0.80 | $0.75 – 0.80 | $0.75 – 0.80 |

### CALIFORNIA (F. O. B. San Joaquin Valley. At. San Francisco, 4c per bbl. more)

| | | | |
|---|---|---|---|
| 14-18 fuel oil (per bbl.) | $0.55 –$0.65 | $0.55 –$0.65 | $0.55 –$0.65 |
| 14-18 Bunker oil (per bbl.) | $0.65 –$0.75 | $0.65 –$0.75 | $0.65 –$0.75 |
| 30-34 gas oil (per bbl.) | $0.95 –$1.05 | $0.95 –$1.05 | $0.95 –$1.05 |
| 27 Plus Diesel oil (per bbl.) | $0.90 –$1.00 | $0.90 –$1.00 | $0.90 –$1.00 |

## PETROLATUMS

**PENNSYLVANIA** (In barrels, carload lots, f. o. b. refinery. In tank cars ½c to ¾c per pound less.) Two refiners quoting.

| | | | |
|---|---|---|---|
| Snow White | 8.25 – 8.50 | 8.25 – 8.50 | 8.25 – 8.50 |
| Lily White | 7.25 – 7.625 | 7.25 – 7.625 | 7.25 – 7.625 |
| Cream White | 6.25 – 6.625 | 6.25 – 6.625 | 6.25 – 6.625 |
| Light Amber | 3.50 – 3.625 | 3.50 – 3.625 | 3.50 – 3.625 |
| Amber | 3.25 – 3.375 | 3.25 – 3.375 | 3.25 – 3.375 |
| Red | 3.00 – 3.125 | 3.00 – 3.125 | 3.00 – 3.125 |

## PETROLEUM COKE

### **OKLAHOMA

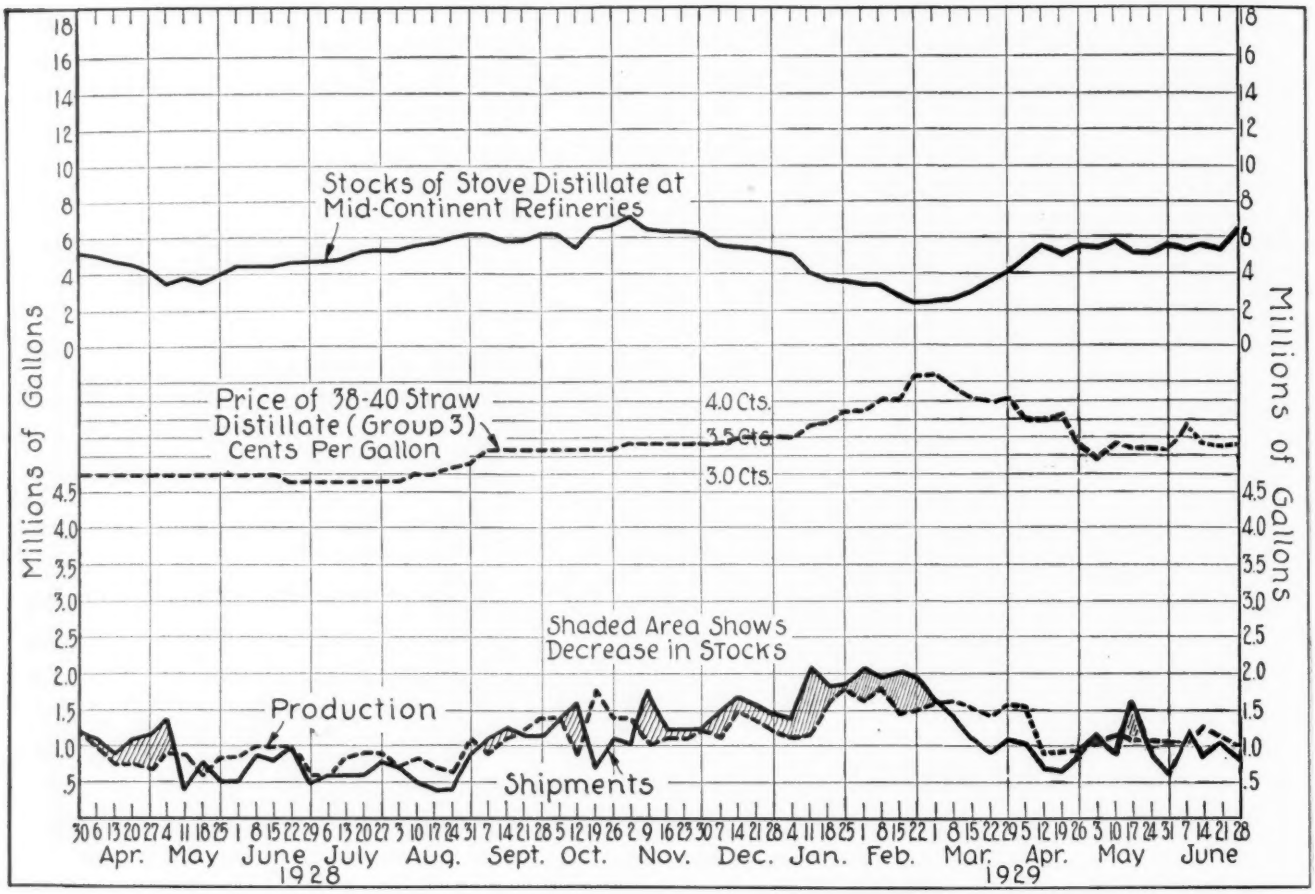
(Per ton in car lots)

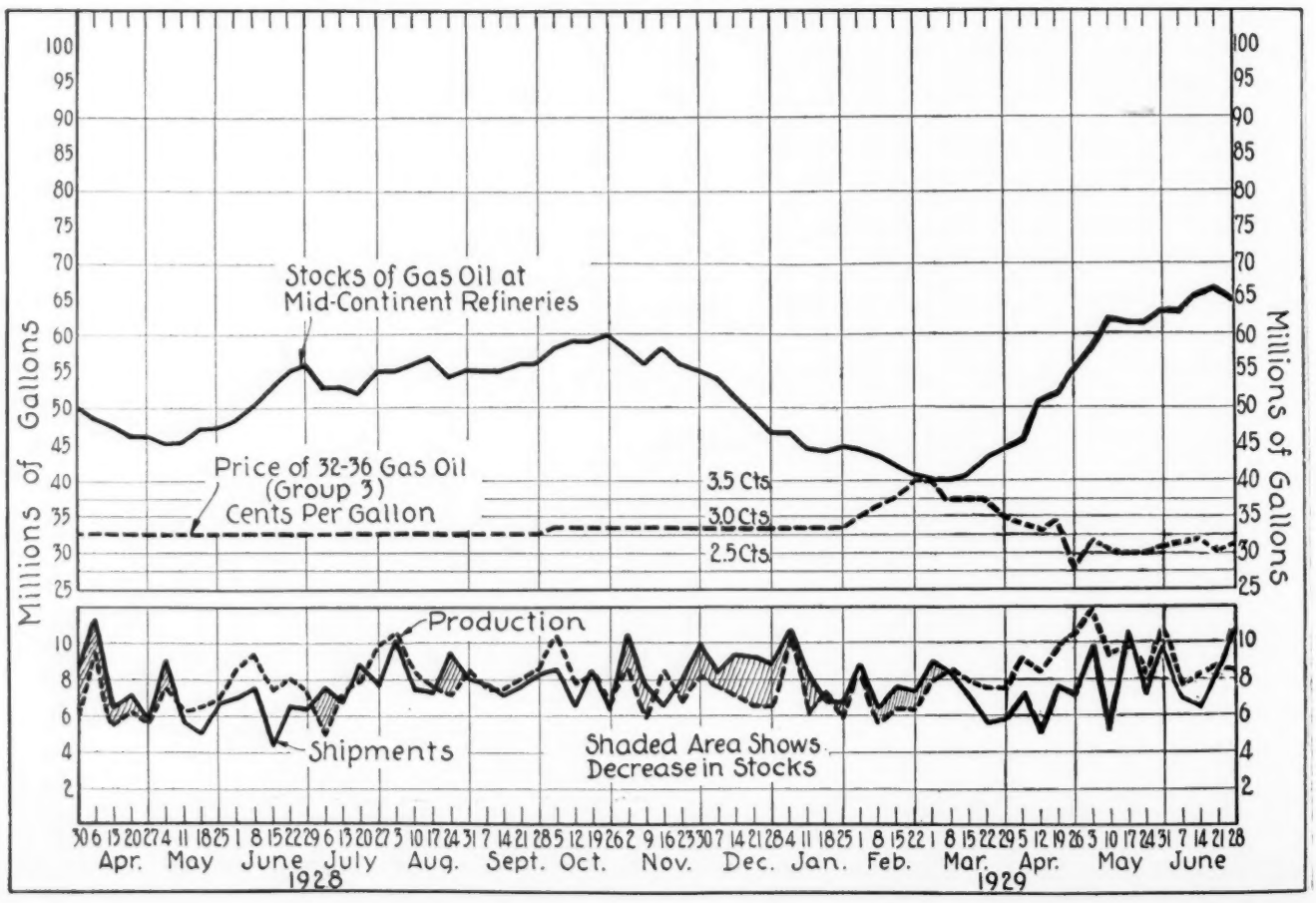
| | | | |
|---|---|---|---|
| Lump | $4.50 – 5.00 | $4.50 – 5.00 | $4.50 – 5.00 |
| Still run | $3.00 | $3.00 | $3.00 |
| Breeze | $2.00 | $2.00 | $2.00 |

†Prices Nominal ††Only One Refiner Quoting *Quotations only **Represents both sales and quotations

# Barometer of Mid-Continent Refinery Market—Week Ending June 28

*Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 93 Plants to National Petroleum News*


Stocks of Stove Distillate at Mid-Continent Refineries
Price of 38-40 Straw Distillate (Group 3) Cents Per Gallon
4.0 Cts.
3.5 Cts.
3.0 Cts.
Shaded Area Shows Decrease in Stocks
Production
Shipments
Millions of Gallons
Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June
1928
1929


Stocks of Gas Oil at Mid-Continent Refineries
Price of 32-36 Gas Oil (Group 3) Cents Per Gallon
3.5 Cts.
3.0 Cts.
2.5 Cts.
Production
Shipments
Shaded Area Shows Decrease in Stocks
Millions of Gallons
Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June
1928
1929

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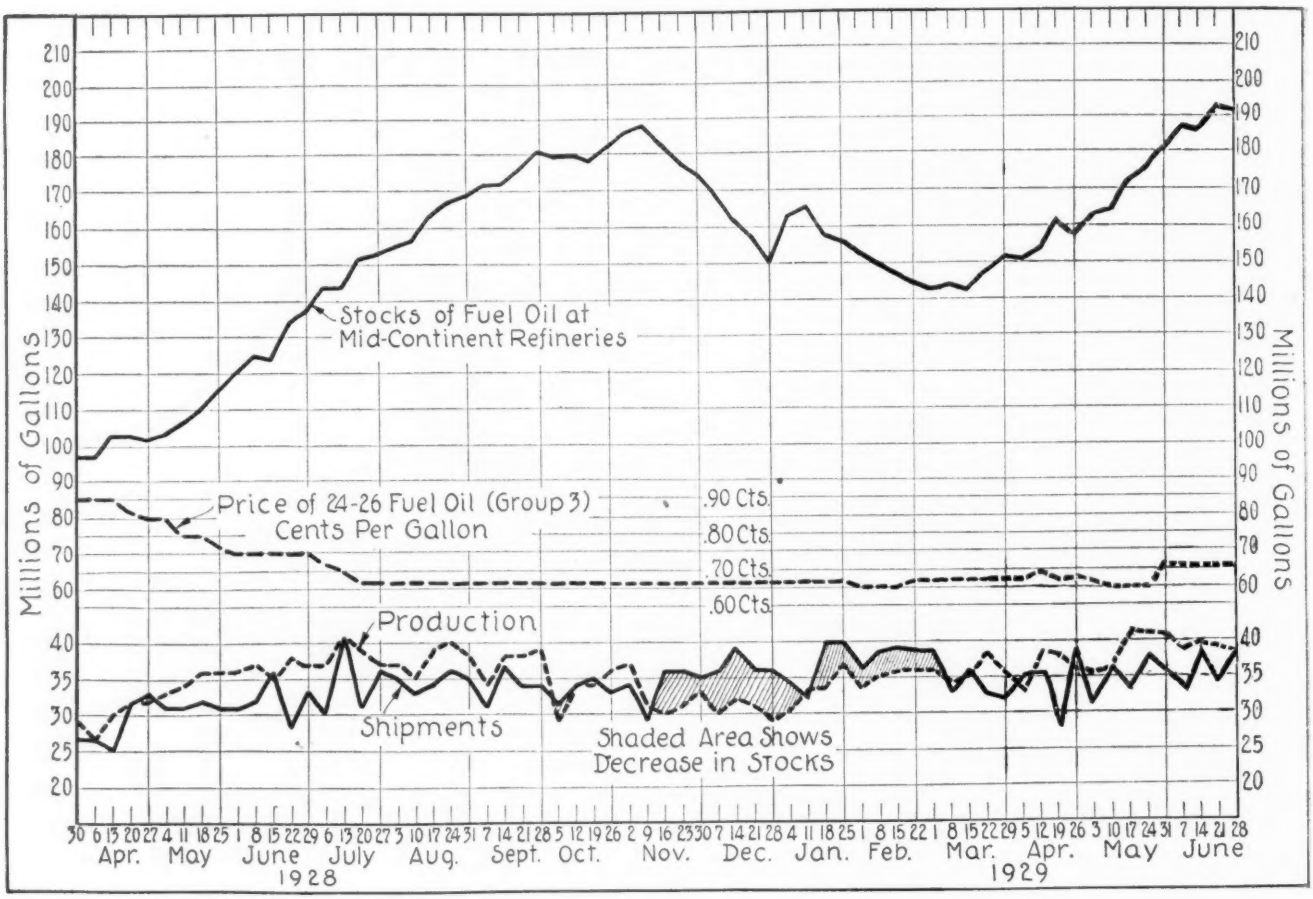
## Barometer of Mid-Continent Refinery Market—Week Ending June 28

*Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 93 Plants to National Petroleum News*


Millions of Gallons
Stocks of Fuel Oil at Mid-Continent Refineries
Price of 24-26 Fuel Oil (Group 3) Cents Per Gallon
.90 Cts.
.80 Cts.
.70 Cts.
.60 Cts.
Production
Shipments
Shaded Area Shows Decrease in Stocks
Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June
1928
1929

# California Refinery Market

## Export Gasoline Demand at Low Ebb

LOS ANGELES, June 29

CALIFORNIA markets were unusually quiet during the past week. No spot sales and few inquiries were reported. Fuel and gas oils were the only commodities among refinery products in which there was any interest.

Exporters continued to face the serious problem of what to do with accumulating gasoline stocks. Although there has been a large volume of this commodity moving on contracts and from California companies to their associated companies on the Atlantic seaboard, there has been very little spot stuff sold.

Quotations for U. S. Motor for export continued to range from 7 to 7.50 cents but there was an even greater feeling than there was last week among local resale agents that 6.75 cents could be done on firm offer.

One broker reported several inquiries for gas oil but was unable to meet competition because of the relatively high tanker rates. Dirty bottoms were up to $0.85 per barrel and clean bottoms commanded $1.07. There was every indication that rates would go still higher.

Natural gasoline was off a shade, being quoted at from 8.50 to 9 cents. No spot sales were reported. A large per cent of the total production of this product is being absorbed by major companies, and since wells are being shut in under the new California state gas law, it is expected that market conditions for this commodity will improve. While actual enforcement of this law is not expected to take place before Aug. 31, efforts are being made to attain partial control of escaping gas before that time.

No spot tank car sales were reported the past week. A resale agent reported he had received an inquiry for some inferior goods, but on the whole business was exceptionally quiet. Prices for gasoline in tank car lots remained as quoted last week both for in and out of state shipment.

One dealer sold a quantity for fuel oil at $0.55 per barrel for consumption both in and outside of the state. This was about in line with last week's quotations.

Major retail gasoline marketers showed considerable consternation as Independent refiners continued to cut into their gallonage. Resellers in San Francisco were reported to be cutting prices in an effort to gain gallonage.

# Pennsylvania Market

### July Gasoline Active

CLEVELAND, July 1.—Western Pennsylvania markets spent the last week of June in a very quiet manner.

Demand for all commodities was light. Kerosene and fuel oil were the only products to show any marked change in price, although the trend of prices for steam refined stocks continued downward. Bright

stocks failed to recede further and gasoline didn't fluctuate one way or the other.

The main topic of conversation among Pennsylvania refiners as the end of the week drew near, was the outlook for July gasoline. As early as June 24 several companies began quoting 10.50 cents, and in some instances 10.25 cents, for U. S. Motor for shipment over July. Considerable business was said to have been booked at these prices.

There were reports, towards the end of the week, that seaboard prices were on the verge of advancing. These were contrary to earlier reports to the effect that July business on the seaboard was being booked at the then current prices.

Many refiners stated that Pennsylvania prices were being held back by the seaboard, and wnen confirmation of advances in the latter market were forthcoming Saturday, the Pennsylvania market situation assumed a different aspect.

In all districts, except the Bradford district, there was a tendency among refiners to withdraw from the market, awaiting further developments on the seaboard. Bradford district refiners stated that advances in tank car prices on the seaboard would be of little help to them, inasmuch as western New York state contracts based on tank wagon, of which there are many, were what had been preventing them from getting higher prices for some time past.

Demand for kerosenes continued relatively slow and prices for all grades dropped 0.125 to 0.375 cent. Better demand for fuel oil for cracking which has been looked for for several weeks failed to materialize. Goods was freely offered in the open market at prices 0.25 to 0.375 cent under those prevailing a week ago.

Neutral oils were lifeless and quotations were generally unchanged although several companies stated that if they were confronted with promising inquiries they wouldn't hesitate to shade their list prices.

The steam refined stock situation became considerably easier last week. Good filterable stock was freely offered at from 28 to 31 cents a gallon. There was a fairly good demand from bright stock manufacturers at around the low of this range.

The supply of filtered stocks was rather limited. Only two companies reported making 600 Warren E and 600 Oil City E. They reported little difficulty in obtaining around 37 cents and 36 cents, respectively, for the two grades.

Manufacturers reported orders for bright stock were coming in satisfactorily and prices apparently were stabilized at around 53 cents for light and 52 cents for dark oil.

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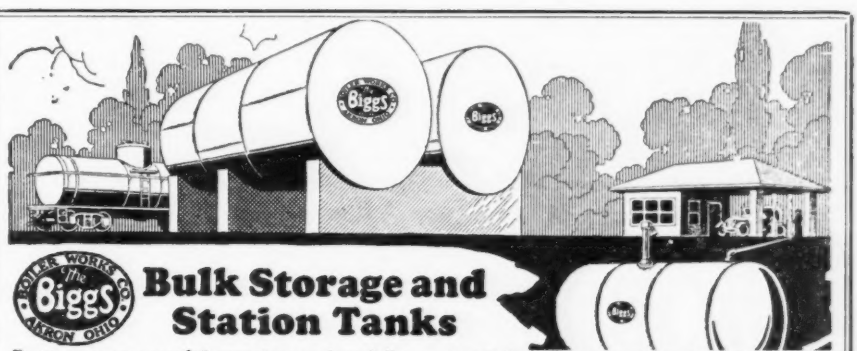

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# New York Domestic Market

## Gasoline Range at N. Y. Widens Again

Staff Special
NEW YORK, June 29

THE unusual situation of having a full cent spread between gasoline quotations at New York, loomed up again June 29, when two companies announced their prices had been advanced to 11 cents, and other companies said they would still remain at 10 cents.

One of these companies which announced the 1-cent advance was the leader in bringing the present price of 10 cents some weeks ago. At that time this company's price was 9 cents. The other is not as large and sells most of its gasoline on contract.

Others of the trade accepted the leading company's announcement with various replies. Some of them stated they would consider making the same advance themselves, while others stated that business would have to be much better before they could raise their prices.

Many companies have said they have not done as much business the past month as they should have and that they have had trouble in making jobbers take out their contract obligations.

There has been some shading of the tank car market although not enough to disturb the market. A bad psychological effect has been produced by one company, a subsidiary of an eastern refiner, which has been selling gasoline in tank wagon in New York, at approximately 10.50 cents per gallon delivered. Handling charges, etc., makes this company's price much under the present tank car price, f.o.b. the refinery. The parent company's quotation on U. S. Motor at New York, in tank cars, is 10 cents.

In contrast, several refiners have reported that business was good and they were having no trouble in obtaining 10 cents. One said that he had sold an Ohio buyer early in the week. 15 cars for prompt shipment at 10 cents and that he had had no trouble in getting that price. This buyer was not a regular patron the seller said, and was in no way forced to buy his gasoline. He also sold a full barge at 10 cents two days later.

Prices at all points have been fairly well maintained with the exception of New England, where reductions occurred about the middle of the week. There are three companies which have terminals at Boston and Providence where their transportation costs amount to little more than a switching charge. This allows them to put their gasoline into those two points at between 10.50 and 11 cents delivered. Some of that material figures out 9.50 cents and under, f.o.b. the refinery. Portland gasoline was also lower, sellers delivering it there for 11.50 to 11.75 cents, whereas a week ago they were asking 12.25 cents.

Sellers at all points have received inquiries for July gasoline but only a few are making quotations. One supplier of California gasoline who sells at the same figure as regular U. S. Motor stated he had accepted some business at 10 cents for over the month. At New York several of the trade prior to Saturday, were of the opinion that 10.50 cents would be a good price for regular U. S. Motor over July. At Philadelphia a large refiner said his price both for spot and over the month would be 10.25 cents.

Prices for other commodities were generally unchanged. Kerosene was freely offered with the market at New York and Philadelphia at 7.75 to 8 cents. Baltimore sellers were supplying nothing lower than 8 cents with the top at 8.25. The 8.25-cent quotation is being made by one company which, until a few days ago, was asking 8.50 cents.

# Gulf Export Market

## Foreign and Domestic Demand Light

Staff Special
NEW YORK, June 29

GULF markets were lifeless the last week in June. One open market cargo of gasoline was reported sold for export shipment but activity continued to fall considerably short of the usual mid-year average.

Several inquiries for gasoline and gas oil which have been in the market for some time past had not been placed up to the close of business June 29 and it was generally believed the buyers had withdrawn from the market.

Perhaps the outstanding feature of the week, as regards to prices, was a 0.75-cent reduction in quotations posted by the Export Petroleum Association Inc., for kerosenes.

There has been little open market demand for kerosene for some time past. This has been due mostly to the high prices prevailing at the Gulf as compared with those in the field, according to several suppliers.

Water white in cargo lots is now quoted at 8 cents and prime white at 7 cents. With the fall buying season for foreign accounts close at hand, several suppliers are anticipating a much better demand in the immediate future.

A leading supplier late in the week reported selling approximately 50,000 barrels of 64-66, 375 end point gasoline for early August shipment to an Independent French buyer. The Association's price of 10 cents was paid. Aside from this, there was no interest in the cargo market.

Demand from South America and the Far East for cased goods was reported fairly good. Contract shipments, particularly, were said to be relatively heavy especially since the summer buying season for these countries is quite far off.

The majority of suppliers advanced their prices for cased gasolines late in the week. U. S. Motor in cases, cargo lots, is quoted generally at $1.90 with the 64-66, 375 end point grade at $2.00.

Demand for gasoline at the Gulf for coastwise shipment continued at low ebb. The market for U. S. Motor was off 0.25-cent. At least two suppliers indicated they would sell at 8.50 cents; others gave 9 cents as their ideas of the market. This compares with a range of 8.75 to 9.25 cents prevailing a week ago.

Quotations for kerosene were down 0.125 to 0.25-cent reflecting the lower markets prevailing in the Mid-Continent. Water white kerosene, 41-43 gravity, was offered at 7 to 7.125 cents. One supplier indicated a willingness to shade the lower figure on firm offer.

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**Standard Buys Three Companies**

NEW YORK, June 29.—Standard Oil Co. of Pennsylvania, subsidiary of the Standard Oil Co. of New Jersey, has purchased the Supreme Oil Co. of Harrisburg, Pa., Spartan Oil Co. of Philadelphia, and the Quality Oil & Gasoline Co. of Pittsburgh.

## Wax Market

### Scale Inquiries Numerous

NEW YORK, June 28.—The wax market continued inactive the past week as far as sales were concerned although a number of sellers reported inquiries were more numerous. Prices were generally unchanged.

The range on white crude scale, both 122-124 and 124-126 A.m.p. grades, narrowed to a flat price. Quotations the week previous were 2.75 to 2.875 cents while at the close of the past week most sellers were quoting 2.75 cents. It was believed, however, that 2.75 cents might be shaded on firm offer. There was one sale reported at 2.60 cents, New York, but it could not be confirmed. One seller sold a small quantity for prompt domestic shipment at 2.70 cents.

Yellow crude scale quotations were still at 2.625 cents. One seller reported quoting 2.75 cents for this grade of material. No sales were reported and several of the trade believed that 2.625 cents could be shaded.

A sale of low melting point semi-refined goods was reported at 2.875 cents, New Orleans, for prompt shipment. It was for shipment to Chili and was one of the few orders booked for export.

The export market continues to be governed by Polish refiners who are quoting much lower prices than United States sellers. One buyer at New York said that European quotations were being made on white crude scale at 3.15 c.i.f. European ports, which, if American refiners were to meet them, would mean they would have to sell at approximately 2.60 cents f.a.s. New York.

Inquiries which have been received offer prices in line with those quoted by Polish refiners. Some refiners a few weeks ago accepted some of these bids but none seem willing now to sell at those figures. One refiner stated that he was contracting some white crude scale for domestic shipment over six months to a year. He was accepting those contracts at about 0.75 cent per pound over the present spot market.

As a rule, refiners are not making extended contracts, preferring to sell only the goods it is necessary to move to keep their stocks down. One or two have withdrawn from the market entirely.

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### Col. Stewart in Alaska

NEW YORK, June 29.—Col. Robert W. Stewart has gone to Alaska, his secretary wrote the American Petroleum Institute in response to the call for the A.P.I. directors' meeting here June 28.

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# Complete Seaboard Market

*(Export Markets for whole year given in OIL PRICE HANDBOOK. Each volume carries refinery, tank wagon, crude and export markets—complete for the whole year)*

## Eastern Domestic Market

**(Prices for tank car lots, f. o. b. refinery or seaboard terminal, representing majority of quotations.)**

| U. S. MOTOR GASOLINE | July 1 | June 24 | June 17 |
|---|---|---|---|
| New York harbor | 10.00 | 10.00 | 10.00 |
| Portland district | **11.50–11.75 | *12.25 | *12.25 |
| Boston district | **10.50–11.00 | *11.75 | *11.75 |
| Providence district | **10.50–11.00 | *11.75 | *11.75 |
| Philadelphia district | 10.00 | 10.00 | 10.00 |
| Baltimore district | 10.00 | 10.00 | 10.00 |
| Norfolk district | 10.00 | 10.00 | 10.00 |
| Charleston district | 10.00 | 10.00 | 10.00 |
| Savannah district | 10.00 | 10.00 | 10.00 |
| Jacksonville district | 10.00 | 10.00 | 10.00 |
| **CALIFORNIA, U. S. MOTOR GASOLINE** | | | |
| New York harbor | 10.00 –10.50 | 10.00 –10.50 | 10.00 –10.50 |
| Philadelphia district | 10.00 | 10.00 | 10.00 |
| Baltimore district | 10.00 | 10.00 | 10.00 |
| **WATER WHITE KEROSENE** | | | |
| New York harbor | 7.75 – 8.00 | 7.75 – 8.00 | 8.00 |
| Philadelphia district | 7.75 – 8.00 | 7.75 – 8.00 | 8.00 |
| Baltimore district | 8.00 – 8.25 | 8.00 – 8.50 | 8.00 – 8.50 |
| **GAS OIL: 28-34 Gravity** | | | |
| New York harbor | 4.75 – 5.00 | 4.75 – 5.00 | 4.75 – 5.00 |
| Boston district | 4.75 – 5.00 | 4.75 – 5.00 | 4.75 – 5.00 |
| **FURNACE OIL: 36-40 Gravity** | | | |
| New York harbor | 6.00 – 6.50 | 6.00 – 6.50 | 6.00 – 6.50 |
| Boston district | 6.00 – 6.50 | 6.00 – 6.50 | 6.00 – 6.50 |
| **GRADE C BUNKER OIL†** | | | |
| New York harbor | $1.05 | $1.05 | $1.05 |
| Boston district | $1.05 | $1.05 | $1.05 |
| **DIESEL OIL** | | | |
| New York harbor | $2.00 –$2.10 | $2.00 –$2.10 | $2.00 –$2.10 |
| **MEDICINAL OILS, RUSSIAN** | | | |
| 885-890 s.g. 325-330 vis. | $0.75 – 0.80 | $0.75 – 0.80 | $0.75 – 0.80 |
| 870-875 s.g. 150-155 vis. | $0.65 – 0.70 | $0.65 – 0.70 | $0.65 – 0.70 |

Note: Above gasoline prices do not include inspection tax levied in some states

*Minimum delivered. **Delivered prices. †Lighterage 5c per bbl. additional

## New York Export Market

**(Lubricating oils are per gal. in bbls.)**

| | July 1 | June 24 | June 17 |
|---|---|---|---|
| **CYLINDER OILS (Pennsylvania Products)** | | | |
| Bright stock, dark | 57.00 –59.00 | 58.00 –60.00 | 58.00 –60.00 |
| 600 D filtered | 47.00 –49.00 | 47.00 –49.00 | 47.00 –49.00 |
| 600 Warren E filtered | 44.00 –45.00 | 45.00 –46.00 | 45.00 –46.00 |
| 600 s.r. unfiltered | 38.00 –40.00 | 40.00 –41.00 | 40.00 –41.00 |
| 650 s.r., unfiltered | 45.00 –46.00 | 46.00 –48.00 | 46.00 –48.00 |
| 600 flash, s.r. | 47.00 –48.00 | 48.00 –50.00 | 48.00 –50.00 |
| 630 flash, s.r. | 52.00 | 51.00 –52.00 | 51.00 –52.00 |
| *Nominal | | | |
| **RED ENGINE OILS (Vis. 100°)** | | | |
| 300 vis. No. 6½ color | 20.00 –21.00 | 20.00 –21.00 | 20.00 –21.00 |
| 250 vis. No. 6 color | 18.00 –20.00 | 18.00 –20.00 | 18.00 –20.00 |
| 200 vis. No. 6 color | 16.00 –18.00 | 16.00 –18.00 | 16.00 –18.00 |
| **PALE ENGINE OILS (Vis. 100°)** | | | |
| 230 vis. No. 3¾ color | 23.50 | 23.50 | 23.50 |
| 180 vis. No. 3¼ color | 18.50 –20.50 | 18.50 –20.50 | 18.50 –20.50 |
| 100 vis. No. 2¼ color | 16.00 –17.00 | 16.00 –17.00 | 16.00 –17.00 |
| **MOTOR OILS (Vis. 100°)** | | | |
| 600 vis. No. 7 color | 33.00 | 33.00 | 33.00 |
| 500 vis. No. 6½ color | 31.00 | 31.00 | 31.00 |
| 400 vis. No. 7¼ color | 30.00 | 30.00 | 30.00 |
| 300 vis. No. 6 color | 25.00 –27.00 | 25.00 –27.00 | 25.00 –27.00 |
| 200 vis. No. 6 color | 24.00 | 24.00 | 24.00 |
| **MEDICINAL OILS** | | | |
| 875-885 s.g. | $0.80 | $0.80 | $0.80 |
| 865-870 s.g. | $0.70 | $0.70 | $0.70 |
| **WAXES (In cents per pound, f.a.s. carload lots)** | | | |
| **WHITE CRUDE SCALE (In barrels)** | | | |
| 122-124 A.m.p. | 2.75 | 2.75 – 2.875 | 2.625– 2.875 |
| 124-126 A.m.p. | 2.75 | 2.75 – 2.875 | 2.625– 2.875 |
| **FULLY REFINED (In burlap bags)** | | | |
| 123-125 A.m.p. Phila. | 3.875– 4.125 | 3.875– 4.125 | 3.875– 4.125 |
| 125-127 A.m.p. | 4.00 – 4.125 | 4.00 – 4.125 | 4.00 – 4.25 |
| 128-130 A.m.p. | 4.25 – 4.50 | 4.25 – 4.50 | 4.25 – 4.50 |
| 130-132 A.m.p. | 5.50 – 5.75 | 5.50 – 5.75 | 5.50 – 5.75 |
| 133-135 A.m.p. | 6.00 – 6.25 | 6.00 – 6.25 | 6.00 – 6.25 |
| 135-137 A.m.p. | 6.50 | 6.50 | 6.50 |
| **YELLOW CRUDE SCALE** | | | |
| 124-126 A.m.p. | 2.625 | 2.625 | 2.50 – 2.625 |

## Gulf Export Market

**(Prices are f. o. b. Gulf oil terminals in Texas and Louisiana, shipments of 20,000 bbls. or more unless otherwise noted and for export shipment only).**

| GASOLINE | July 1 | June 24 | June 17 |
|---|---|---|---|
| U. S. Motor | 8.50 | 8.50 | 8.50 |
| 60-62 400 e.p. | 9.50 | 9.50 | 9.50 |
| 61-63, 390 e.p. | 9.75 | 9.75 | 9.75 |
| 64-66, 375 e.p. | 10.00 | 10.00 | 10.00 |
| U. S. Motor, cases (cargoes) | $1.85 | $1.75 | $1.75 |
| 64-66, cases (cargoes) | $2.00 | $1.90 | $1.90 |
| **KEROSENE** | | | |
| 44 water white | 8.00 | 8.75 | 8.75 |
| 41-43 prime white | 7.00 | 7.75 | 7.75 |
| Water white, cases (cargoes) | $1.80 | $1.80 | $1.80 |
| Prime white, cases (cargoes) | $1.70 | $1.70 | $1.70 |
| **DOMESTIC GAS & BUNKER OILS** | | | |
| *26-30 translucent gas oil | 4.00 | 4.00 | 4.00 |
| *30 plus translucent gas oil | 4.00 – 4.125 | 4.00 – 4.125 | 4.00 – 4.125 |
| Grade C bunker oil | $0.95 –$1.00 | $0.95 –$1.00 | $0.95 –$1.00 |
| Grade C bunker oil, cargoes | $0.75 – 0.85 | $0.75 – 0.85 | $0.75 – 0.85 |
| *Less than ½ of 1% sulfur. | | | |
| **MEXICAN CRUDE AND BUNKER OILS (F. O. B. Steamer, Tampico)** | | | |
| Heavy Panuco crude taxes to be paid | $0.60 –$0.65 | $0.60 –$0.65 | $0.60 –$0.65 |
| Grade C bunker oil, for bunkering purposes, taxes paid | $0.95 –$1.00 | $0.95 –$1.00 | $0.95 –$1.00 |
| **SOUTH TEXAS LUBRICATING OILS, (Viscosity at 100° F.( cold test 0) (Tanker, f. o. b. Houston)** | | | |
| 100 vis. No. 2 unfiltered pale | 7.00 | 7.00 | 6.50 – 6.75 |
| 200 vis. No. 3 unfiltered pale | 8.50 – 9.50 | 8.50 – 9.50 | 8.50 – 9.50 |
| 300 vis. No. 3 unfiltered pale | 9.50 –10.50 | 9.50 –10.50 | 9.50 –10.50 |
| 500 vis. No. 3½ unfiltered pale | 11.00 –12.00 | 11.00 –12.00 | 11.00 –12.00 |
| 750 vis. No. 4 unfiltered pale | 13.50 –14.00 | 13.50 –14.00 | 13.50 –14.00 |
| 1200 vis. No. 5 unfiltered pale | 16.50 –17.00 | 16.50 –17.00 | 16.50 –17.00 |
| 200 vis. No. 5-6 red oil | 8.00 – 8.50 | 8.00 – 8.50 | 8.00 – 8.50 |
| 300 vis. No. 5-6 red oil | 8.50 – 9.00 | 8.50 – 9.00 | 8.50 – 9.00 |
| 500 vis. No. 5-6 red oil | 10.00 –10.50 | 10.00 –10.50 | 10.00 –10.50 |
| 750 vis. No. 5-6 red oil | 12.00 –12.50 | 12.00 –12.50 | 12.00 –12.50 |
| 1200 vis. No. 5-6 red oil | 16.50 –17.00 | 16.50 –17.00 | 16.50 –17.00 |

## Gulf Domestic Market

**(Prices are f.o.b. Gulf oil terminals in Texas and Louisiana in shipments of 20,000 bbls. or more, representing sellers' opinions, for domestic shipment only).**

| | July 1 | June 24 | June 17 |
|---|---|---|---|
| U. S. Motor gasoline | 8.50 – 9.00 | 8.75 – 9.25 | 9.00 – 9.50 |
| 41-43 w.w. kerosene | 7.00 – 7.125 | 7.25 | 7.25 |
| *26-32 translucent gas oil | 4.00 | 4.00 | 4.00 |
| *Less than ½ of 1% sulfur. | | | |

## Pacific Export Market

**(Quotations are at seaboard, Los Angeles, in cargo lots, cents per gallon, except where otherwise noted.)**

| | July 1 | June 24 | June 17 |
|---|---|---|---|
| Gasoline, U. S. Motor, 53-55 Gravity | 7.00 – 7.50 | 7.00 – 7.50 | 7.00 – 7.50 |
| Gasoline, U. S. Motor-blends and special cuts | 7.50 –10.00 | 7.50 –10.00 | 7.50 –10.00 |
| Gas Oil, 30-34, per barrel | $0.95 –$1.05 | $0.95 –$1.05 | $0.95 –$1.05 |
| Diesel Oil, 27 plus, per barrel | $0.875–$1.00 | $0.875–$1.00 | $0.875–$1.00 |
| Bunker oil, 14-18, per barrel | $0.70 –$0.85 | $0.70 –$0.85 | $0.70 –$0.85 |
| Fuel oil, 14-18 per barrel | $0.60 –$0.85 | $0.60 –$0.85 | $0.60 –$0.85 |
| Kerosene, 38-40 w.w., 125-150 flash, per gal. | 5.50 – 6.25 | 5.50 – 6.25 | 5.50 – 6.25 |
| **Cased Goods** | | | |
| Gasoline, U. S. Motor | $1.75 –$1.85 | $1.75 –$1.85 | $1.75 –$1.85 |
| Kerosene, 38-40 w.w., 125, 150 flash | $1.45 –$1.50 | $1.45 –$1.50 | $1.45 –$1.50 |

## Tanker Rates

**(Approximate tanker freight rates to Continental ports, in shillings per ton of 2240 pounds, British sterling; to American ports, cents per barrel.)**

| | July 1 | |
|---|---|---|
| | Crude &/or Fuel | Refined Oil &/or Spirits |
| Calif. to U. K or Continental ports* | 33–35 | 38–40 |
| Gulf to U. K. or Continental ports* | 20–25 | 23–25 |
| North Atlantic to U. K. or Continental ports* | 18–23 | 21–23 |
| Calif. to North Atlantic ports (not E. of N. Y.) | 90–95 | $1.07–$1.10 |
| Gulf to North Atlantic ports (not E. of N. Y.)** | 35–38 | 40 |

*Continental ports in the range between Bordeaux and Hamburg, both inclusive.

**For Venezuela loading 1c per bbl. additional. For Tampico loading 4c per bbl. additional.

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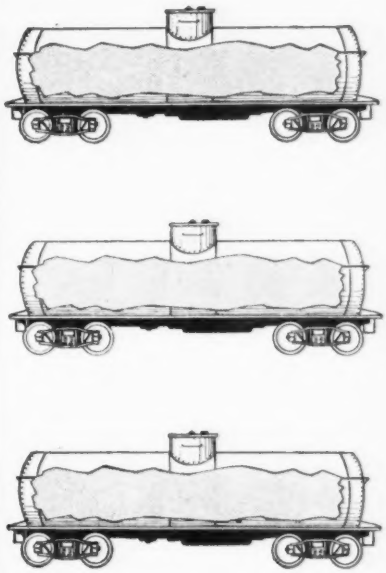

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**DYESTUFFS & CHEMICALS, INCORPORATED.**

**11th and Monroe Sts., ST. LOUIS, MO.**

# Tank Wagon Service Station Markets for Gasoline and Kerosene

***(OIL PRICE HANDBOOK has t.w. and s.s. markets for a whole year, arranged for quick reference)***

These Prices in Effect July 1, 1929, as Posted by Principal Marketing Companies

## S.O. NEW JERSEY TERRITORY

| | Gasoline | | | | Oil |
|---|---|---|---|---|---|
| | T.W. | Tax | Total T.W. | S.S | T.W. |
| Atlantic City, N. J. | 12 | 2 | 14 | 18 | 13 |
| Newark, N. J. | 14 | 2 | 16 | 20 | 13 |
| Annapolis, Md. | 14 | 4 | 18 | 22 | 13 |
| Baltimore, Md. | 14 | 4 | 18 | 22 | 12 |
| Cumberland, Md. | 14 | 4 | 18 | 22 | 13 |
| Washington, D. C. | 14 | 2 | 16 | 20 | 12 |
| Danville, Va. | 14 | 5 | 19 | 23 | 12 |
| Norfolk, Va. | 14 | 5 | 19 | 23 | 13 |
| Richmond, Va. | 14 | 5 | 19 | 23 | 13 |
| Roanoke, Va. | 14 | 5 | 19 | 23 | 13 |
| Petersburg, Va. | 14 | 5 | 19 | 23 | 13 |
| Charleston, W. Va. | 14 | 4 | 18 | 22 | 13 |
| Keyser, W. Va. | 14 | 4 | 18 | 22 | 13 |
| Parkersburg, W. Va. | 12 | 4 | 16 | 20 | 13 |
| Wheeling, W. Va. | 14 | 4 | 18 | 22 | 13 |
| Charlotte, N. C. | 14 | 5 | 19 | 23 | 13 |
| Hickory, N. C. | 14 | 5 | 19 | 23 | 13 |
| Mt. Airy, N. C. | 14 | 5 | 19 | 23 | 13 |
| Salisbury, N. C. | 14 | 5 | 19 | 23 | 13 |
| Charleston, S. C. | 14 | 6 | 20 | 24 | 13 |
| Columbia, S. C. | 14 | 6 | 20 | 24 | 13 |

## CONTINENTAL OIL

| | | | | | |
|---|---|---|---|---|---|
| Denver, Colo. | 14 | 4 | 18 | 21 | 15.5 |
| Pueblo, Colo. | 14 | 4 | 18 | 21 | 15.5 |
| Grand Junc., Colo. | 18.5 | 4 | 22.5 | 25.5 | 19 |
| Casper, Wyo. | 17 | 4 | 21 | 24 | 14 |
| Cheyenne, Wyo. | 18 | 4 | 22 | 25 | 15.5 |
| Butte, Mont. | 20.5 | 5 | 25.5 | 28.5 | 20 |
| Helena, Mont. | 20.5 | 5 | 25.5 | 28.5 | 20 |
| Salt Lake City, Utah | 18.5 | 3½ | 22 | 25 | 17 |
| Boise, Ida. | 20.5 | 4 | 24.5 | 27.5 | 19 |
| Twin Falls, Ida. | 20.5 | 4 | 24.5 | 28.5 | 19 |
| Albuquerque, N. M. | 16 | 5 | 21 | 24 | 17 |

## S. O. CALIFORNIA

| | | | | | |
|---|---|---|---|---|---|
| Phoenix, Ariz. | 14 | 4 | 18 | 22 | 21.5 |
| Los Angeles, Cal. | 16.5 | 3 | 19.5 | 23.5 | 15.5 |
| Fresno, Cal. | 17 | 3 | 20 | 24 | 16.5 |
| San Francisco, Cal. | 17 | 3 | 20 | 24 | 15.5 |
| Reno, Nev. | 21 | 4 | 25 | 29 | 19 |
| Portland, Ore. | 17.5 | 3 | 20.5 | 24.5 | 16.5 |
| Seattle, Wash. | 17.5 | 3 | 20.5 | 24.5 | 16.5 |
| Spokane, Wash. | 21.5 | 3 | 24.5 | 28.5 | 20.5 |
| Tacoma, Wash. | 17.5 | 3 | 20.5 | 24.5 | 16.5 |

**Note: 3c per gal. discount to dealers off t.w. price thru S. O. California territory.**

## S. O. LOUISIANA

| | | | | | |
|---|---|---|---|---|---|
| Little Rock, Ark. | 15 | 5 | 20 | 24 | 13 |
| Alexandria, La. | 14 | 4 | 18 | 22 | †16 |
| Baton Rouge, La. | 13 | 4 | 17 | 21 | †14.5 |
| Lake Charles, La. | ††15.5 | 4 | ††19.5 | ††23.5 | †16 |
| New Orleans, La. | *14.5 | 4 | *18.5 | 22.5 | †16 |
| Shreveport, La. | 14.5 | 4 | 18.5 | 22.5 | †15 |
| Lafayette, La. | **15 | 4 | **19 | **23 | †14 |
| Bristol, Tenn. | 17 | 5 | 22 | 25 | 14 |
| Chattanooga, Tenn. | 16.5 | 5 | 21.5 | 25.5 | 16 |
| Knoxville, Tenn. | 15 | 5 | 20 | 24 | 16 |
| Nashville, Tenn. | 14 | 5 | 19 | 23 | 16 |
| Memphis, Tenn. | 13 | 5 | 18 | 22 | 12.5 |

*New Orleans gasoline prices include 1c parish tax in addition to 4c state tax, and kerosene prices include 1c state tax and 1c parish tax.

†Kerosene price in Louisiana includes 1c state tax.

**Lafayette gasoline prices include 1c parish tax in addition to 4c state tax.

††Lake Charles gasoline prices include 1c parish tax.

## S. O. KENTUCKY

| | | | | | |
|---|---|---|---|---|---|
| Ashland, Ky. | 13 | 5 | 18 | 19 | 15.5 |
| Catlettsburg, Ky. | 13 | 5 | 18 | 19 | 15.5 |
| Lexington, Ky. | 16 | 5 | 21 | 23 | 15.5 |
| Louisville, Ky. | 16 | 5 | 21 | 23 | 15 |
| Covington, Ky. | 16 | 5 | 21 | 22 | 15.5 |
| Clarksdale, Miss. | 17 | 5 | 22 | 24 | 12.5 |
| Gulfport, Miss.†† | 18.5 | 5 | 23.5 | 25.5 | 14 |
| Jackson, Miss. | 17 | 5 | 22 | 24 | 13 |
| Natchez, Miss. | 16.5 | 5 | 21.5 | 23.5 | 14 |
| Vicksburg, Miss. | 16.5 | 5 | 21.5 | 23.5 | 14 |
| Birmingham, Ala. | 18 | 4 | 22 | 24 | 16 |
| Mobile, Ala.‡ | 18 | 4 | 22 | 24 | 15 |
| Montgomery, Ala.* | 19 | 4 | 23 | 25 | 16.5 |
| Atlanta, Ga. | 18 | 4 | 22 | 24 | †16.5 |
| Augusta, Ga. | 18 | 4 | 22 | 24 | †15.5 |
| Macon, Ga. | 18 | 4 | 22 | 24 | †16.5 |
| Savannah, Ga. | 17 | 4 | 21 | 23 | †15.5 |
| Jacksonville, Fla. | 17 | 5 | 22 | 24 | 14.5 |
| Miami, Fla. | 18 | 5 | 23 | 25 | 15.5 |
| Tampa, Fla. | 17 | 5 | 22 | 24 | 14.5 |
| Pensacola, Fla.** | 18 | 5 | 23 | 25 | 14.5 |

**Note: Net price to dealers is 2c under posted t.w. price thru S. O. Kentucky territory.**

## Latest Changes In Tank Wagon Prices

### Gasoline Changes

**S. O. New Jersey**—T.w. only of gasoline cut 2c, Parkersburg, to 16c, including 4c tax, **June 5.**

T.w. up 1c, s.s. up 3c, Salisbury, to 19c and 23c respectively, including 5c tax, **June 24.**

**Atlantic Refining**—S.s. prices gasoline up 1c, Pennsylvania, covering tax increase to 4c, **July 1.**

**S. O. Indiana**—T.w. and s.s. gasoline up 1c, North Dakota, covering tax increase to 3c, **July 1.**

**Continental Oil**—S.s. price only of gasoline up 1c, Twin Falls, Ida., to 28.5c, **June 28.**

**Magnolia Petroleum**—S.s. price only up 1c, Fort Smith, to 20c, **June 24.**

T.w. price only cut 1c, El Paso, to 16c, including 2c tax, **June 27.**

**S. O. California**—T.w. and s.s. gasoline up 1c, Washington, covering tax increase to 3c, **July 1.**

*Local privilege tax of 1 cent on gasoline and ½ cent on kerosene at Montgomery included. ‡Mobile gasoline prices include 1c city tax.

†Georgia kerosene prices include 1c state tax.

**Both tank wagon prices include 1c city tax at Pensacola, which went into effect Oct. 15, 1926.

††Both tank wagon prices at Gulfport include Harrison county privilege tax of 2c.

## S. O. NEBRASKA

| | Gasoline | | | | Oil |
|---|---|---|---|---|---|
| | T.W. | Tax | Total T.W. | S.S. | T.W. |
| Omaha, Neb. | 16.25 | 4 | 20.25 | 22.25 | 13.25 |
| McCook | 17.75 | 4 | 21.75 | 23.75 | 14.75 |
| Norfolk | 16.75 | 4 | 20.75 | 22.75 | 13.75 |
| North Platte | 17.75 | 4 | 21.75 | 23.75 | 14.50 |
| Scottsbluff | 17.75 | 4 | 21.75 | 23.75 | 14.25 |

## S. O. INDIANA

| | | | | | |
|---|---|---|---|---|---|
| Chicago, Ill. | 16.0 | 0 | 16.0 | 17.0 | 13 |
| Decatur, Ill. | 16.2 | 0 | 16.2 | 17.2 | 13.1 |
| E. St. Louis, Ill. | 15.4 | 0 | 15.4 | 16.4 | 12.2 |
| Joliet, Ill. | 16.4 | 0 | 16.4 | 17.4 | 13.3 |
| Peoria, Ill. | 16.2 | 0 | 16.2 | 17.2 | 13.1 |
| Quincy, Ill. | 16.2 | 0 | 16.2 | 17.2 | 12.9 |
| Indianapolis, Ind. | 16.2 | 4 | 20.2 | 21.2 | 14.2 |
| Evansville, Ind. | 16 | 4 | 20 | 21 | 14 |
| South Bend, Ind. | 16.4 | 4 | 20.4 | 21.4 | 14.4 |
| Detroit, Mich. | 16.8 | 3 | 19.8 | 20.8 | 14.7 |
| Grand Rapids, Mich. | 16.7 | 3 | 19.7 | 20.7 | 14.6 |
| Saginaw, Mich. | 16.9 | 3 | 19.9 | 20.9 | 14.8 |
| Green Bay, Wisc. | 16.6 | 2 | 18.6 | 19.6 | 13.4 |
| Madison, Wisc. | 16.3 | 2 | 18.3 | 19.3 | 13.1 |
| Milwaukee, Wisc. | 16.1 | 2 | 18.1 | 19.1 | 12.9 |
| La Crosse, Wisc. | 17.2 | 2 | 19.2 | 20.2 | 14 |
| Minneapolis, Minn. | 17.2 | 3 | 20.2 | 21.2 | 13.9 |
| Duluth, Minn. | 17.5 | 3 | 20.5 | 21.5 | 13.9 |
| Mankato, Minn. | 17.1 | 3 | 20.1 | 21.1 | 13.7 |
| Des Moines, Ia. | 16.5 | 3 | 19.5 | 20.5 | 13.3 |
| Davenport, Ia. | 16.5 | 3 | 19.5 | 20.5 | 13.3 |
| Sioux City, Ia. | 16.1 | 3 | 19.1 | 20.1 | 12.9 |
| Mason City, Ia. | 16.5 | 3 | 19.5 | 20.5 | 13.3 |
| St. Louis, Mo. | *15.9 | 2 | 17.9 | 18.9 | 12.3 |
| Kansas City, Mo. | †16.9 | 2 | 18.9 | 19.9 | 11.6 |
| St. Joseph, Mo. | †16.5 | 2 | 18.5 | 19.5 | 12.2 |
| Fargo, N. D. | 18.9 | 3 | 21.9 | 22.9 | 15.9 |
| Grand Forks, N. D. | 19.2 | 3 | 22.2 | 23.2 | 16.2 |
| Minot, N. D. | 18.9 | 3 | 21.9 | 22.9 | 15.9 |
| Pierre, S. D. | 17 | 4 | 21 | 22 | 14.4 |
| Huron, S. D. | 17.3 | 4 | 21.3 | 22.3 | 14.7 |
| Wichita, Kans. | 14.8 | 3 | 17.8 | 18.8 | 11.8 |
| Bartlesville, Okla. | 14.5 | 3 | 17.5 | 18.5 | 11.5 |

S. O. Indiana's quantity contract price schedule thru territory except Chicago on tank truck deliveries of gasoline, figured from the service station price, is 2c for 500 gals. or more a month; 2½c for 2000 gals. or more a month and 3c for 6000 gals. or more a month.

In Chicago and vicinity, these discounts apply: Over 500 gals. per month, 2c per gal. off service station price; over 1,000 gals. per month, 4c per gal. off service station price.

*Includes city tax of ½c.

†Includes city tax of 1c.

## S. O. OHIO

| | | | | | |
|---|---|---|---|---|---|
| Bryan and Chillicothe | *13 | 4 | *17 | 17 | 14 |
| Lima and Hamilton. | **14 | 4 | **18 | 18 | 14 |
| ††12 Competitive Points. | ††15 | 4 | ††19 | 19 | 14 |
| †At 6 Competitive Points | *15 | 4 | *19 | 20 | 14 |
| Elsewhere in Ohio. | *16 | 4 | *20 | 21 | 14 |

†These 6 points are: Marion, Hicksville, Celina, Arlington, Mortimer and Nevada, O.

*Dealers and commercial accounts get 2c per gal off t. w. price

††These 12 points are: Findlay, Washington C. H., Arcadia, Perrysburg, Fostoria, Wapakoneta, Urbana, Jamestown, Xenia, St. Paris, Ada and Piqua. Discount to dealers is 3c per gal. off t.w. price.

**Discount to dealers and commercial consumers is 3c per gal. off t.w. price.

## MAGNOLIA PETROLEUM

| | | | | | |
|---|---|---|---|---|---|
| Muskogee, Okla. | 12 | 4 | 16 | 19 | 13 |
| Oklahoma City. | 12 | 4 | 16 | 19 | 10 |
| Tulsa, Okla. | 10 | 4 | 14 | 18 | 10 |
| Fort Smith, Ark.† | 12 | †3 | 15 | 20 | 12 |
| Little Rock, Ark. | 15 | 5 | 20 | 24 | 13 |
| Texarkana, Ark.* | 14 | *2 | 16 | 20 | 13 |
| Dallas, Tex. | 13 | 2 | 15 | 19 | 13 |
| Fort Worth, Tex. | 13 | 2 | 15 | 18 | 12 |
| Houston, Tex. | 13 | 2 | 15 | 19 | 13 |
| San Antonio, Tex. | 13 | 2 | 15 | 19 | 11 |
| El Paso, Tex. | 14 | 2 | 16 | 20 | 16 |

*Within city of Texarkana, the state tax on gasoline is 2c per gal. conforming with the Texas state tax. In this district outside of the city the 5c Arkansas tax applies.

†Within city of Fort Smith, Oklahoma tax of 3c applies. In this district outside of the city, the 5c Arkansas tax applies.

## S. O. NEW YORK

Due to local price conditions at many points in S. O. New York territory, actual prices on both gasoline and kerosene are being made at under the posted tank wagon prices published below.

| | | | | | |
|---|---|---|---|---|---|
| New York City | 17 | 2 | 19 | *21 | 15 |
| Albany, N. Y. | 15 | 2 | 17 | 19 | 15 |
| Buffalo, N. Y. | 15 | 2 | 17 | 19 | 14 |
| Rochester, N. Y. | 15 | 2 | 17 | 19 | 13 |
| Syracuse, N. Y. | 15 | 2 | 17 | 19 | 12 |
| Boston, Mass. | 16 | 2 | 18 | 20 | 15 |
| Augusta, Me. | 16 | 4 | 20 | 22 | 15 |
| Manchester, N. H. | 16 | 4 | 20 | 22 | 15 |
| Burlington, Vt. | 16 | 4 | 20 | 22 | 13 |

Note: S. O. New York allows concessions of 1 to 2c per gal. to dealers under posted tank wagon prices.

*The Standard of New York does not operate stations in New York City. This figure is the retail price of a principal station operator in New York selling Socony gasoline.

## ATLANTIC REFINING

| | | | | | |
|---|---|---|---|---|---|
| Pittsburgh, Pa. | 17 | * | 17 | 23 | 14 |
| Philadelphia, Pa. | 17 | * | 17 | 23 | 14 |
| Allentown, Pa. | 17 | * | 17 | 23 | 14 |
| Erie, Pa. | 13 | * | 13 | 19 | 14 |
| Scranton, Pa. | 17 | * | 17 | 23 | 14 |
| Altoona, Pa. | 17 | * | 17 | 23 | 14 |
| Williamsport, Pa. | 16 | * | 16 | 20 | 14 |

Above prices include these inspection fees on both gasoline and kerosene, per gallon: Alabama, 1,40c on gasoline, 1/2c kerosene; Arkansas, 1/20c on both; Florida, 1/8c on both; Georgia, 1/10c on both; Indiana, 4/25c to 1/2c on both; Kansas, 3/50c on both; Louisiana, 1/32c on gasoline; Minnesota, 3/50c on both; Missouri, 3/10c to 1/2c on both; Nebraska, 3/50c to ½c on both; North Carolina, 1/4c on both; North Dakota, 1/20c on both; Oklahoma, 4/25c on both; South Carolina, 1/8c on both; South Dakota, 1/10c on both; Tennessee, 2/5c on gasoline and 1/2c to 4/5c on kerosene; Wisconsin, 3/50c on both.

Kerosene inspection fees only, per gallon; Iowa, 7/100c; Michigan 1/5c to 4/5c per gal.

In Illinois, cities and villages have the power to appoint oil inspectors and fix inspection fees which is done in some instances. In some cases in the above state or other states there are local inspection fees.

## Tank Wagon, Service Station Markets for Gasoline and Kerosene

Prices in Effect July 1, 1929

### ATLANTIC REFINING

| | Gasoline T.W. | Tax | Total T.W. | S.S. | Oil T.W. |
|---|---|---|---|---|---|
| Dover, Del. | 17 | 3 | 20 | 22 | 14 |
| Wilmington, Del. | 17 | 3 | 20 | 22 | 14 |
| Boston, Mass. | 16 | 2 | 18 | 20 | 15 |
| Springfield, Mass. | 16 | 2 | 18 | 20 | 15 |
| Worcester, Mass. | 15 | 2 | 17 | 18 | 15 |
| Fall River, Mass. | 14 | 2 | 16 | 17 | 15 |
| Providence, R. I. | 14 | 2 | 16 | 17 | 15 |
| Hartford, Conn. | 16 | 2 | 18 | 20 | 14 |
| New Haven, Conn. | 16 | 2 | 18 | 20 | 15 |
| Atlantic City, N. J. | 16 | 2 | 18 | 20 | 13 |
| Camden, N. J. | 16 | 2 | 18 | 20 | 13 |
| Trenton, N. J. | 16 | 2 | 18 | 20 | 13 |
| Annapolis, Md. | 16 | 4 | 20 | 22 | 13 |
| Baltimore, Md. | 16 | 4 | 20 | 22 | 13 |
| Hagerstown, Md. | 16 | 4 | 20 | 22 | 13 |
| Richmond, Va. | 16 | 5 | 21 | 23 | 13 |
| Wilmington, N. C. | 16 | 4 | 20 | 22 | 13 |
| Brunswick, Ga. | 17 | 4 | 21 | 23 | **16.5 |
| Jacksonville, Fla. | 17 | 5 | 22 | 24 | 14.5 |

**Note: 2c per gal. discount off t.w. price to dealers thru territory; also 2c off to commercial accounts under contract for one year.**

*4-cent state tax is collected by retail dealer and paid by him directly to state.

**Georgia kerosene prices include 1c state tax.

### V. M. & P. NAPHTHA

(Changes ordinarily occur coincident with gasoline price changes)

| | Oleum Spirits | V.M.&P. Naphtha | Cleaner Naphtha |
|---|---|---|---|
| Chicago | 15.7 | 17.2 | 19 |
| Detroit | 17.4 | 18.9 | 20.7 |
| Kansas City | †15.9 | †17.4 | †19.2 |
| Milwaukee | 16.4 | *19.9 | *21.7 |
| Minneapolis | *19.7 | *21.2 | *23 |
| St. Louis | 15.6 | 17.1 | 18.9 |
| New York | | 17 | 23 |
| Boston | | 19 | 23 |

*Includes 2c state tax. †Includes 1c city tax.

### Petroleum Spirits

| | |
|---|---|
| **Tank Cars (Solvent)** | |
| New York refineries | 12.00 |
| Philadelphia refineries | 12.00 |
| **Tank Wagon or Steel Barrels** | |
| New York City | 17 |
| New England | 19 |
| New Jersey | 16 |
| Pennsylvania | 16–18 |

### CANADA

(Per Imperial Gallon, which is 1.2 American Gallons)

| | Gasoline T.W. | Tax | Total T.W. | S.S | Oil T.W. |
|---|---|---|---|---|---|
| **ONTARIO** | | | | | |
| Toronto | 20.5 | 5 | 25.5 | 29 | 21 |
| Ottawa | 14.5 | 5 | 19.5 | 23 | 21 |
| Cochrane | 25.5 | 5 | 30.5 | .. | 26 |
| Ft. William | 23.5 | 5 | 28.5 | 32 | 23.5 |
| **MANITOBA** | | | | | |
| Winnipeg | 22.5 | 3 | 25.5 | 29 | 22.5 |
| **SASKATCHEWAN** | | | | | |
| Regina | 27 | 3 | 30 | 34 | 27 |
| **ALBERTA** | | | | | |
| Edmonton | 28.5 | 5 | 33.5 | 37 | 28.5 |
| Calgary | 24.5 | 5 | 29.5 | 33 | 24.5 |
| **BRITISH COLUMBIA** | | | | | |
| Vancouver | 23 | 3 | 26 | 30 | 24 |
| **QUEBEC** | | | | | |
| Montreal | 21.5 | 5 | 26.5 | 30 | 22 |
| Quebec City | 22.5 | 5 | 27.5 | 31 | 23 |
| Three Rivers | 22.5 | 5 | 27.5 | 31 | 23 |
| **NEW BRUNSWICK** | | | | | |
| St. John | 25 | 5 | 30 | 34 | 25 |
| Moncton | 25 | 5 | 30 | 34 | 25 |
| **NOVA SCOTIA** | | | | | |
| Halifax | 25 | 5 | 30 | 34 | 25 |
| Sydney | 25 | 5 | 30 | 34 | 25 |
| **PRINCE EDWARD ISLAND** | | | | | |
| Charlottetown | 25 | 5 | 30 | 34 | 25 |

Note: In districts surrounding these points 1c additional is added to city price.


# Capacities From 1 to 52 Cubic Ft.

Dayton Air Compressors are built in a plant where air compressors are the only product. We have been building them for years; our craftsmen are specialists in this line; we have anticipated the needs of the filling station for years and we are now prepared to meet all air demands of the Super Service or "One Stop" Stations now being constructed.

## Investigate the "DAYTON" Equipment

We have established a reputation for furnishing air equipment that renders full service, at a price much below that asked for other types providing the same amount of air production and delivery. We ask you to make comparison of 'Dayton' Service combined with 'Dayton' price.

## Specializing Means Lower Prices

We do not, however, want you to buy on price alone, but on price, service and operating cost.

### The "DAYTON" Air Compressor Style "G"

The only two-stage compressor in the world built without

Connecting Rod—

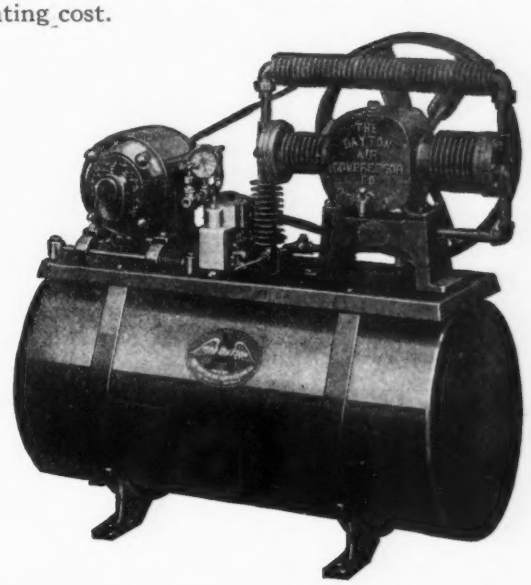
Crosshead Pin—

Cotter Pin—

Bolts—

Does not rattle, score cylinder or get out of order.

*Send for Bulletin*



## DAYTON AIR COMPRESSORS

425 Valley St. Dayton, Ohio

# *Final Quality Depends First, on the Crude*

OVER 11,000 producing wells feed the pipe lines leading to Pure Oil's large, modern refineries. Some of this crude is rich in gasoline content; some is valuable for making high grade motor oil; while some is best suited as a base for industrial oils or greases. But, because Pure Oil controls this vast production, it has a sure supply from which its experts select the cream of the crudes for refining each product.

Every step in the producing, refining, and marketing of Pure Oil products is efficiently handled by Pure's own organization. That is why Pure Oil products are uniformly good . . . always delivered on the dot!

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*Conducted by* Edwin Franko Goldman
Every Tuesday Night over WJZ and chain

## THE PURE OIL COMPANY
U. S. A.

***One of the major producing, refining and marketing companies—yet strictly independent***

REFINERIES:

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Cabin Creek Jct., W. Va.
Heath, Ohio
Ardmore, Okla.
Muskogee, Okla.
Smith's Bluff, Texas

SALES OFFICES:

Chicago
New York
Minneapolis
Philadelphia
Pittsburgh
Columbus, O.
Charleston, W. Va.
Norfolk, Va.
Atlanta, Ga.
Tampa, Fla.
Miami, Fla.
Pensacola, Fla.
Tulsa, Okla.
Beaumont, Tex.

# Crude Oil Prices (in Effect July 1, 1929)

*(Crude prices for the whole year in OIL PRICE HANDBOOK published annually)*

### EASTERN FIELDS

**(Posted by Joseph Seep Purchasing Agency)**

Penna. Grade Oil in New York Transit Lines (Alleghany, N. Y. District) ..... *$4.05
Bradford District Oil in National Transit Lines (Bradford District) ..... *4.05
Penna. Grade Oil in National Transit Lines (Other Pennsylvania) ..... *4.05
Penna. Grade Oil in Southwest Penna. Pipe Lines (Other Pennsylvania) ..... 4.00
Penna. Grade Oil in Eureka Pipe Lines (West Virginia) ..... 3.90
Penna. Grade Oil in Buckeye Pipe Lines (Macksburg, O. district) ..... 3.85
Cabell Grade in Eureka Pipe Lines (West Virginia) ..... 1.65
Corning Grade in Buckeye Pipe Lines (Ohio) ..... 1.90
Corning, O., heavy grade ..... 1.80
Somerset Oil in Cumberland Pipe Lines (Kentucky) ..... 1.80
Ragland Grade in Cumberland Pipe Lines (Kentucky) ..... $0.60

*Oil run prior to July 1, 1929 is $4.00 per bbl.

**(Posted by Stoll Oil Refining Co.)**

Oil City, Ky., oil in Stoll lines ..... $1.80

### MICHIGAN

**(Posted by Dixie Oil Co.)**

Dundee (Muskegon) ..... $1.10

Traverse (Muskegon):

| | | | |
|---|---|---|---|
| 32-32.9 | $1.25 | 37-37.9 | $1.50 |
| 33-33.9 | 1.30 | 38-38.9 | 1.55 |
| 34-34.9 | 1.35 | 39-39.9 | 1.60 |
| 35-35.9 | 1.40 | 40-40.9 | 1.65 |
| 36-36.9 | 1.45 | 41-41.9 | 1.70 |

**(Posted by Pure Oil Co.)**

Midland, Midland County ..... $1.70

### CENTRAL STATES FIELDS

**Posted by Ohio Oil Co.**
Effective May 21, 1929

| | | | |
|---|---|---|---|
| Wooster | $1.90 | Princeton | $1.75 |
| Lima | 1.80 | Illinois | 1.75 |
| Waterloo | 1.20 | Plymouth | 1.28 |
| Indiana | 1.57 | West Kentucky | 1.83 |

### CANADIAN CRUDE

**Posted by Imperial Oil Refineries, Ltd.**

Petrolia ..... $2.20
Oil Springs ..... 2.27

### OKLAHOMA, KANSAS and NORTH TEXAS

**Prices of Prairie Oil & Gas Co.**
**(In Oklahoma, Kansas, North and East Central Texas)**
Effective May 20, 1929

| | | | |
|---|---|---|---|
| Below 25 | $0.85 | 35-35.9 | $1.40 |
| 25-25.9 | 0.90 | 36-36.9 | 1.45 |
| 26-26.9 | 0.95 | 37-37.9 | 1.50 |
| 27-27.9 | 1.00 | 38-38.9 | 1.55 |
| 28-28.9 | 1.05 | 39-39.9 | 1.60 |
| 29-29.9 | 1.10 | 40-40.9 | 1.65 |
| 30-30.9 | 1.15 | 41-41.9 | 1.70 |
| 31-31.9 | 1.20 | 42-42.9 | 1.75 |
| 32-32.9 | 1.25 | 43-43.9 | 1.80 |
| 33-33.9 | 1.30 | 44 and above | 1.85 |
| 34-34.9 | 1.35 | | |

**Humble Oil & Refining Co. Prices**

(Ranger, North Texas, Mexia, Powell, Boggy Creek, Richland, Wortham, Lytton Springs, Currie, Moran and Nocona crudes all in Texas.)

May 20, 1929, same schedule as Prairie in above fields.

**Magnolia Petroleum Co.**

(In Oklahoma, Kansas and North and East Central Texas)

May 20, 1929, Magnolia posted in above fields and in Panola Co., same schedule as Prairie, except these grades:

| | | | |
|---|---|---|---|
| Below 26 | $0.70 | 29-29.9 | $0.95 |
| 26-26.9 | 0.75 | 30-30.9 | 1.05 |
| 27-27.9 | 0.85 | 31-31.9 | 1.15 |
| 28-28.9 | 0.90 | | |

May 20, 1929, Glasscock, Crane, Upton, Winkler, Howard and Mitchell Counties same prices as Humble's postings in West Texas which see:

Iatan district ..... $0.93
Corsicana heavy ..... 0.80
Luling ..... 0.90
Mirando ..... 0.90

**Carter Oil Co.**

(Oklahoma and Kansas)

May 20, 1929, same schedule as Prairie except Carter does not post oil below 25.

### PANHANDLE, TEXAS

**Humble Oil & Refining Co.**
Effective May 20, 1929

Hutchinson and Carson Counties:

| | | | |
|---|---|---|---|
| Below 32 | $0.90 | 38-38.9 | $1.25 |
| 32-32.9 | 0.95 | 39-39.9 | 1.30 |
| 33-33.9 | 1.00 | 40-40.9 | 1.35 |
| 34-34.9 | 1.05 | 41-41.9 | 1.40 |
| 35-35.9 | 1.10 | 42-42.9 | 1.45 |
| 36-36.9 | 1.15 | 43-43.9 | 1.50 |
| 37-37.9 | 1.20 | 44 and above | 1.55 |

Wheeler County:

| | | | |
|---|---|---|---|
| Below 30 | $0.90 | 37-37.9 | $1.30 |
| 30-30.9 | 0.95 | 38-38.9 | 1.35 |
| 31-31.9 | 1.00 | 39-39.9 | 1.40 |
| 32-32.9 | 1.05 | 40-40.9 | 1.45 |
| 33-33.9 | 1.10 | 41-41.9 | 1.50 |
| 34-34.9 | 1.15 | 42-42.9 | 1.55 |
| 35-35.9 | 1.20 | 43-43.9 | 1.60 |
| 36-36.9 | 1.25 | 44 and above | 1.65 |

Gray County:

| | | | |
|---|---|---|---|
| Below 29 | $0.90 | 37-37.9 | $1.35 |
| 29-29.9 | 0.95 | 38-38.9 | 1.40 |
| 30-30.9 | 1.00 | 39-39.9 | 1.45 |
| 31-31.9 | 1.05 | 40-40.9 | 1.50 |
| 32-32.9 | 1.10 | 41-41.9 | 1.55 |
| 33-33.9 | 1.15 | 42-42.9 | 1.60 |
| 34-34.9 | 1.20 | 43-43.9 | 1.65 |
| 35-35.9 | 1.25 | 44 and above | 1.70 |
| 36-36.9 | 1.30 | | |

Above prices met by The Texas Co. and Magnolia on May 20.

### WEST TEXAS

**Humble Oil & Refining Co.**
Effective May 20, 1929

Winkler, Crane, Upton, Crockett, Howard and Pecos Counties, also Lea County, N. Mex.:

| | | | |
|---|---|---|---|
| Below 25 | $0.70 | 25-25.9 | $0.74 |
| 26-26.9 | 0.78 | 32-32.9 | $1.02 |
| 27-27.9 | 0.82 | 33-33.9 | 1.06 |
| 28-28.9 | 0.86 | 34-34.9 | 1.10 |
| 29-29.9 | 0.90 | 35-35.9 | 1.14 |
| 30-30.9 | 0.94 | 36 and above | 1.18 |
| 31-31.9 | 0.98 | | |

May 20, 1929, The Texas Co. posted same prices as Humble in Crane, Upton, Pecos and Winkler., and Magnolia in Crane, Upton, Winkler, Glasscock, Howard and Mitchell.

### SOUTHWEST TEXAS

**(Posted by Humble Oil & Refining Co.)**
Effective May 20, 1929

Mirando ..... $0.90
Salt Flat ..... 1.25

### NORTH LOUISIANA—ARKANSAS FIELDS

**Prices of Standard Oil Co. of Louisiana**

Caddo, Homer, Haynesville, Bull Bayou, El Dorado Crichton, De Soto and **Cotton Valley.
Effective May 22, 1929

| | | | |
|---|---|---|---|
| Below 28 | $1.00 | 36-36.9 | $1.45 |
| 28-28.9 | 1.05 | 37-37.9 | 1.50 |
| 29-29.9 | 1.10 | 38-38.9 | 1.55 |
| 30-30.9 | 1.15 | 39-39.9 | 1.60 |
| 31-31.9 | 1.20 | 40-40.9 | 1.65 |
| 32-32.9 | 1.25 | 41-41.9 | 1.70 |
| 33-33.9 | 1.30 | 42-42.9 | 1.75 |
| 34-34.9 | 1.35 | 43-43.9 | 1.80 |
| 35-35.9 | 1.40 | 44 and above | 1.85 |

**Cotton Valley, below 36, $0.85. Beginning with 36-36.9, same schedule as above.

Smackover, below 24 ..... $0.85
do 24 and above ..... 1.00
Bellevue ..... 1.30
*Urania, La ..... 1.10
†East El Dorado ..... 0.75

*Posted by Louisiana Oil Refining Corp.
†Posted by Magnolia Petroleum Co.

May 20, The Texas Co. same schedule in Louisiana as Standard, plus these grades: 24-24.9, $0.85; 25-25.9, $0.90; 26-26.9, $0.95; 27-27.9, $1.00.

May 22, Magnolia, Atlantic, Shreveport-Eldorado Pipe Line, Louisiana Oil, and Gulf Companies met Standard schedule in Louisiana-Arkansas fields.

### STEPHENS, ARKANSAS

**Louisiana Oil Refining Corp., and Atlantic Oil Producing Co.**
Effective May 22, 1929

| | | | |
|---|---|---|---|
| Below 28 | $0.90 | 30-30.9 | $1.02 |
| 28-28.9 | 0.94 | 31-31.9 | 1.06 |
| 29-29.9 | 0.98 | 32 and above | 1.10 |

### GULF COASTAL

**Posted by Humble Oil & Refining Co.**
Effective May 20, 1929

| | | | |
|---|---|---|---|
| Grades A | $1.30 | 29-29.9 | $1.30 |
| Grades B: | | 30-30.9 | 1.33 |
| Below 25 | $1.15 | 31-31.9 | 1.36 |
| 25-25.9 | 1.18 | 32-32.9 | 1.39 |
| 26-26.9 | 1.21 | 33-33.9 | 1.42 |
| 27-27.9 | 1.24 | 34-34.9 | 1.45 |
| 28-28.9 | 1.27 | 35 and above | 1.48 |

Fields classified as A and B are Spindletop, Goose Creek, Hull, Liberty, Sour Lake, West Columbia, Orange, Boling, Pierce Junction, Sugarland and Raccoon Bend. All other fields are Grades A only.

## Pioneer Southern Jobber Sells to Atlantic

AUGUSTA, Ga., June 29.—The Peoples Oil Co., the oldest Independent oil jobbing company in the south, has been purchased by the Atlantic Refining Co. The company was organized in 1904 by the late Hollis C. Boardman, Sr., who had been in the service of the Standard Oil Co. 22 years at that time.

The Peoples company operated bulk plants at Columbia, Charleston, and North Augusta, S. C., and an extensive system of filling stations. Since 1919 it has been operated by the four sons of the founder.

Hollis C. Boardman, Jr., and his brother Harold are to continue in charge of the business for the Atlantic. The two remaining brothers Clayton and Alonzo have retained a bulk plant and two service stations at Augusta, Ga., under the name Consumers Oil Co.

## T. T. Eason Acquires Bolene Refining

ENID, Okla., June 28.—Acquisition by T. T. Eason, president of the Eason Oil Co., oil marketer here, of the controlling interest in the Bolene Refining Co. and in the Healdton Oil & Gas Co., makes that company a producing, refining and marketing unit.

The Eason company has been a marketing company, selling its products in six middle-western states under the Red "E" brand. Its production will come from the Healdton company and refining operations will be carried on at the 5000-barrel plant of the Bolene company at Enid.

Included in its expansion program is the placing on the market of Ethyl gasoline in Oklahoma. The company markets in Oklahoma, Wisconsin, Minnesota, Illinois, Iowa and Kansas.

### Crude Price Changes

OIL CITY, Pa., July 1.—On July 1 Joseph Seep Purchasing Agency posted prices of $4.05 per barrel on Pennsylvania grade crude in Alleghany and Bradford districts in New York Transit and National Transit lines respectively, and also on Pennsylvania grade crude within Pennsylvania in National Transit lines.

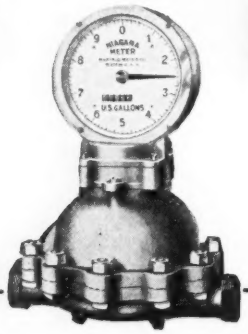
This new price is effective on all crude run on July 1 and after. A price of $4.00 is effective on crude run prior to July 1.

All other eastern crudes were unchanged.

## ACCURACY

Regardless of how much or how little gasoline or oil passes through a Niagara meter, it accurately registers and records, preventing loss, theft or favoritism.

And a Niagara repays its cost by enabling you to sell and profit on the gasoline and oil that would be unaccounted for without a meter! Send today for our newest catalogue.



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GASOLINE
FUEL OIL
KEROSENE
300 MINERAL SEAL
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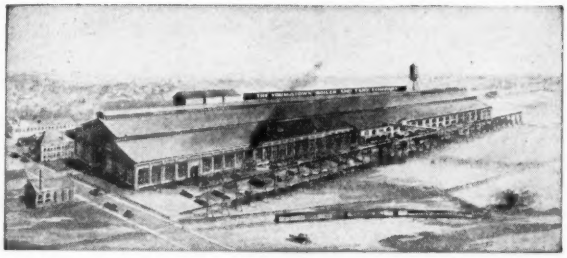
*May We Serve You*

**Superior Oil Works**
and
**Mutual Refining Co.**
Warren, Pa.

## Youngstown
"KEENE TANKS MADE"
STANDARDIZED
REG. U.S. PAT. OFF.



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# Crude Oil Prices (in Effect July 1, 1929)

***(Crude prices for the whole year in OIL PRICE HANDBOOK published annually)***

### GULF COASTAL

**Prices of The Texas Co.**

Effective May 20, 1929

| | | | |
|---|---|---|---|
| Grades A | $1.30 | *Grades B | $1.15 |
| ‡Grades B (light crude): | | | |
| 35-35.9 | $1.49 | 40-40.9 | $1.69 |
| 36-36.9 | 1.53 | 41-41.9 | 1.73 |
| 37-37.9 | 1.57 | 42-42.9 | 1.77 |
| 38-38.9 | 1.61 | 43-43.9 | 1.81 |
| 39-39.9 | 1.65 | 44 and above | 1.85 |

*Grades B include all heavy crudes which do not meet tests for Grades A or for Gulf Coast light crude.

‡The Texas Co.'s gravity and price schedule on all below 35° is same as Humble's postings on Grades B.

### ROCKY MOUNTAIN FIELDS

**Prices of Ohio Oil Co., and Midwest Refining Co.**

(Salt Creek prices effective May 20, 1929)

| | |
|---|---|
| ‡Salt Creek 29-29.9 | $1.10 |
| " " 30-30.9 | 1.15 |
| " " 31-31.9 | 1.20 |
| " " 32-32.9 | 1.25 |
| " " 33-33.9 | 1.30 |
| " " 34-34.9 | 1.35 |
| " " 35-35.9 | 1.40 |
| " " 36-36.9 | 1.45 |
| " " 37 and above | 1.50 |
| Elk Basin | 1.65 |
| Grass Creek light | 1.65 |
| Big Muddy | $1.43 |
| Lance Creek | 1.68 |
| Rock Creek | 1.40 |
| Mule Creek | 1.20 |
| Rex Lake | 1.10 |
| ‡Osage | 1.65 |
| ‡Cat Creek, Mont | 1.65 |
| Sunburst, Mont | 1.75 |
| ‡Hogback, N. Mex | 1.70 |
| Artesia, N. Mex | 1.08 |

‡Posted by Midwest Refining Co. Midwest also buys Grass Creek light and Elk Basin.

### CALIFORNIA

***Standard Oil Co. of California**

| Gravity | Signal Hill Seal Beach Alamitos Heights Huntington Beach | Inglewood Torrance | Olinda-Brea Canon Richfield | Athens-Rosecrans Dominguez | Elwood Terrace | Whittier La Habra | Coyote Hills | Santa Fe Springs | Newhall McKittrick †Kern River | Midway Sunset Buena Vista & Elk Hills | Lost Hills | Coalinga | Wheeler Ridge | Montebello | Kettleman Hills | *Santa Maria (Orcutt) | *Ventura |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14-14.9 | $ .70 | $ .70 | $ .70 | .... | .... | $ .70 | $ .70 | .... | $ .50 | $ .50 | $ .50 | $ .50 | $ .50 | $ .70 | .... | $ .65 | $ .70 |
| 15-15.9 | .70 | .70 | .70 | .... | .... | .70 | .70 | .... | .50 | .50 | .50 | .50 | .50 | .70 | .... | .65 | .70 |
| 16-16.9 | .70 | .70 | .70 | .... | .... | .70 | .70 | .... | .50 | .50 | .50 | .50 | .50 | .70 | .... | .65 | .70 |
| 17-17.9 | .70 | .70 | .70 | .... | .... | .70 | .70 | .... | .50 | .50 | .50 | .50 | .50 | .70 | .... | .65 | .70 |
| 18-18.9 | .75 | .75 | .75 | .... | .... | .75 | .75 | .... | .50 | .56 | .56 | .56 | .56 | .70 | .... | .70 | .75 |
| 19-19.9 | .80 | .80 | .80 | .... | .... | .80 | .80 | .... | .50 | .62 | .62 | .62 | .62 | .75 | $1.65 | .70 | .80 |
| 20-20.9 | .85 | .85 | .85 | .... | .... | .84 | .84 | .... | .... | .68 | .68 | .68 | .68 | .80 | for | .70 | .85 |
| 21-21.9 | .89 | .89 | .89 | .... | .... | .88 | .88 | .89 | .... | .74 | .74 | .74 | .74 | .85 | 55° | .86 | .86 |
| 22-22.9 | .93 | .93 | .93 | .... | .... | .91 | .91 | .92 | .... | .80 | .80 | .80 | .80 | .90 | gravity | .87 | .87 |
| 23-23.9 | .97 | .97 | .97 | .... | .... | .... | .94 | .95 | .... | .85 | .85 | .85 | .85 | .95 | and | .90 | .90 |
| 24-24.9 | 1.01 | 1.01 | 1.01 | 1.01 | .... | .... | .97 | .98 | .... | .90 | .90 | .88 | .88 | .98 | over | .94 | .94 |
| 25-25.9 | 1.05 | 1.05 | 1.05 | 1.05 | .... | .... | 1.00 | 1.01 | .... | .95 | .95 | .91 | .91 | 1.01 | .... | .98 | .98 |
| 26-26.9 | 1.09 | 1.09 | 1.09 | 1.09 | .... | .... | 1.04 | 1.04 | .... | 1.00 | 1.00 | .94 | .94 | 1.04 | .... | 1.02 | 1.02 |
| 27-27.9 | 1.13 | 1.13 | 1.13 | 1.13 | .... | .... | 1.08 | 1.07 | .... | 1.05 | 1.05 | .98 | .97 | 1.07 | .... | .... | 1.06 |
| 28-28.9 | 1.17 | 1.17 | 1.17 | 1.17 | .... | .... | 1.12 | 1.10 | .... | 1.10 | 1.10 | 1.02 | .... | 1.10 | .... | .... | 1.10 |
| 29-29.9 | 1.21 | .... | 1.21 | 1.21 | .... | .... | 1.16 | 1.15 | .... | 1.16 | 1.16 | 1.06 | .... | 1.13 | .... | .... | 1.14 |
| 30-30.9 | 1.25 | .... | 1.25 | 1.25 | .... | .... | 1.20 | 1.20 | .... | 1.22 | 1.22 | 1.10 | .... | 1.16 | .... | .... | 1.18 |
| 31-31.9 | 1.30 | .... | .... | 1.30 | .... | .... | .... | 1.25 | .... | 1.28 | 1.28 | 1.14 | .... | .... | .... | .... | 1.23 |
| 32-32.9 | 1.35 | .... | .... | 1.35 | .... | .... | .... | 1.30 | .... | 1.34 | 1.34 | 1.18 | .... | .... | .... | .... | 1.28 |
| 33-33.9 | .... | .... | .... | 1.41 | .... | .... | .... | 1.35 | .... | 1.40 | 1.40 | 1.22 | .... | .... | .... | .... | 1.34 |
| 34-34.9 | .... | .... | .... | 1.47 | $1.16 | .... | .... | 1.40 | .... | .... | 1.46 | 1.26 | .... | .... | .... | .... | .... |
| 35-35.9 | .... | .... | .... | 1.53 | 1.22 | .... | .... | 1.45 | .... | .... | .... | 1.30 | .... | .... | .... | .... | .... |
| 36-36.9 | .... | .... | .... | 1.59 | 1.28 | .... | .... | 1.50 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 37-37.9 | .... | .... | .... | 1.65 | 1.34 | .... | .... | 1.55 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 38-38.9 | .... | .... | .... | 1.71 | 1.40 | .... | .... | 1.60 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 39-39.9 | .... | .... | .... | 1.77 | 1.46 | .... | .... | 1.65 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 40-40.9 | .... | .... | .... | 1.83 | 1.52 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 41-41.9 | .... | .... | .... | 1.89 | 1.58 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 42-42.9 | .... | .... | .... | 1.95 | 1.64 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |

*Santa Maria and Ventura postings are by Union Oil Co. Union Oil Co. posts same prices in all above fields as Standard except it does not post prices in Wheeler Ridge, Whittier, La Habra, Newhall and Kettleman Hills. Standard does not contract for crude testing 11-13.9 gravity, but pays 45c a barrel when purchased.

†Kern River down to 12° gravity is 50c; 11-11.9 is 45c.

# REFINERS' and COMPOUNDERS' SUPPLIES

Following are average market prices for materials used by refiners and compounders effective on the date shown.

### Refiners' Supplies

| | July 1 | June 24 |
|---|---|---|
| Soda Ash light 58% bags, cwt. | $1.32 | $1.32 |
| Silicate of Soda 60 deg. drums, cwt. | $1.55 | $1.55 |
| Silicate of Soda 40 deg. tank cars, cwt. | $0.60 | $0.60 |
| Silicate of Soda 40 deg. drums cwt. | $0.80 | $0.80 |
| Sal Soda wks. | $0.90-1.00 | $0.90-1.00 |
| Caustic Soda 76% solid, cwt. | $2.90 | $2.90 |
| Sulfuric Acid 60 deg. tank cars, f.o.b. shipping point per ton | $11.00 | $11.00 |
| Oleum 20%, fuming sulfuric, tank cars, wks. | $18.50 | $18.50 |
| Sulfur, flowers of, cwt. | $3.50-4.50 | $3.50-4.50 |
| Liquid Chlorine, tank cars, wks, lb. | 3.50–5.00 | 3.50–5.00 |

### Compounders' Supplies

| | July 1 | June 24 |
|---|---|---|
| **Vegetable Oils** | | |
| Linseed carloads, spot, lb. | 10.70 | 10.40 |
| Tanks, spot | 9.90 | 9.60 |
| Soya Bean, Tanks, coast, lb. | 9.00 | 9.625 |
| **Oleic Acid** | | |
| Distilled, tanks, lb. | 9.25 | 9.25 |
| Distilled, bbls, lb. | 10.375 | 10.375 |
| Saponified, tanks, lb. | 9.50 | 9.50 |
| Saponified, bbls, lb. | 10.625 | 10.625 |
| **Lard Oils** | | |
| Prime Winter Strained, lb. | 15.00 | 15.00 |
| Extra Winter Strained, lb. | 13.00 | 13.00 |
| Extra, lb. | 12.625 | 12.265 |
| Extra No. 1, lb. | 12.00 | 12.00 |
| No. 1, lb. | 11.75 | 11.75 |
| No. 2, lb. | 11.50 | 11.50 |
| Tallow oil, lb. | 10.75 | 10.75 |
| **Neatsfoot Oil** | | |
| Pure, bbls, lb. | 13.50 | 13.50 |
| Extra, bbls, lb. | 12.25 | 12.25 |
| No. 1 bbls, lb. | 12.00 | 12.00 |
| Cold Pressed, lb. | 13.75 | 13.75 |
| **Fish Oils** | | |
| Menhaden Oil | | |
| Light Pressed, gal. | 71 | 71 |
| Light Pressed, tank cars, N.Y., gal. | 65 | 65 |
| White bleached, gal. | 77 | 77 |
| Yellow bleached, gal. | 73 | 73 |
| Whale, extra winter bleached, gal. | 82 | 82 |
| **Naval Stores** | | |
| Steam distilled turpentine, N. Y., gal. | 51 | 51 |
| Steam distilled turpentine, Savannah, gal. | 46 | 46 |
| Gum turpentine, N. Y., gal. | 54.00 | 54.00 |
| Gum turpentine, f.o.b. cars Savannah, gal. | 50 | 50 |
| Wood Rosin F, N. Y., bbl. | $7.30 | $7.30 |
| Wood Rosin F, Savn'h, bbl. | $6.50 | $6.50 |
| Gum Rosin B, N. Y., bbl. | $7.50 | $7.50 |
| Gum Rosin B, f.o.b. cars Savannah, bbl. | $6.80 | $6.80 |
| Rosin oil, pure, gal. | 61 | 61 |
| Rosin oil, compounded, gal. | 50 | 50 |
| **Pine Tar** | | |
| Kiln burnt, bbl. | $13.00–14.00 | $13.00–14.00 |
| Retort, bbl. | $13.50–14.50 | $13.50–14.50 |
| **Alcohol** | | |
| Denatured Formula 5, in bbls., per gal. | 57–64 | 57–64 |

# OIL STOCKS AND FINANCES

National Petroleum News

## Shell Union Finances Expansion With $40,000,000 Preferred

Staff Special
NEW YORK, June 29

SHELL UNION OIL CORP. this week issued $40,000,000 of 5½ per cent cumulative convertible preferred stock at $98 per $100 par share. Proceeds from the issue are to be used in reimbursing the corporation for expenditures in the acquisition of the New Orleans Refining Co., the New England Oil Refining Co. and other assets now owned by the Shell Eastern Petroleum Products, Inc., and to provide for further expansion of marketing facilities.

This issue makes the Shell Union's capital structure as follows: $48,280,000 of 5 per cent debentures due May 1, 1947; $29,187,000 5 per cent pipe line debentures, due Nov. 1, 1952; the new preferred stock, and 13,062,336 no par shares of common stock, 3,000,000 shares of which were issued early this year.

President J. C. van Eck, stated in a letter to the underwriters that Shell Union subsidiaries have production in the United States of approximately 124,000 barrels a day. These subsidiaries last year produced 47,788,000 barrels of crude. Its refineries in California, Houston and New Orleans districts, in the Mid-Continent, at Wood River, Ill., and at Chicago have a capacity of 240,000 barrels a day. These plants in 1928 ran 53,536,000 barrels of crude.

Its pipe line system is 3085 miles long and it has concrete and steel storage for 28,000,000 barrels of oil.

Sales of all subsidiaries in 1928 exceeded $179,000,000 and net profits exceeded $20,000,000, Mr. van Eck reported. Profits in the first half of 1929 will exceed those in the first half of 1928, Mr. van Eck estimated.

On March 31, 1929, net assets of Shell Union after deduction of all liabilities except capital stock, amounted to $306,796,226. The current assets that date amounted to $118,061,558 and current liabilities to $24,620,136.

Mr. van Eck also wrote:

"In order to take care of the new supply of crude oil made available to the corporation as a result of developments in West Texas it was decided to build a new refinery at Houston. This refinery was under construction during 1928 and is now in operation. Methods to improve refinery technique are being introduced in practically all the refineries of the corporation on the Pacific Coast as well as in Mid-Continent so that the efficiency of those units can be maintained on as high a level as possible.

"The importance of scientific research and the development of refinery technique, which are essential if the industry is to obtain the best results are being recognized on an increasing scale. The research work of the corporation is now centralized in Shell Development Co., and laboratories have been built in which the research work is conducted by a staff of qualified experts. In connection therewith a new company has been formed, Shell Chemical Co., to commercialize such processes as may be developed by the research work."

The new stock is convertible into common stock at the rate of $30 a share for the common on or before July 1, 1932, and at $35 a share from that date until or on July 1, 1935. The issue is callable as a whole at any time on 30 days' notice or in part for sinking fund on any quarterly dividend date after June 30, 1935, at $105 a share and accrued dividends. Holders will be entitled to convert at the prevailing rate at any time up to and including the date set for redemption.

The underwriting syndicate consists of Lee, Higginson & Co., Guaranty Co. of New York, National City Co., Hayden, Stone & Co., Dominick & Dominick, and Clark, Dodge & Co.

Stockholders are expected to approve the offering at a special meeting July 8, although the stock has been placed on sale.

The company's subsidiaries are expanding their marketing facilities in every state except Texas which it has not entered as a market.

* * *

COLUMBUS, O., June 27.—Shell Petroleum Corp. is negotiating to purchase several marketing companies in Ohio, it is reported in oil circles here. The company last month took over the Accurate Measure Oil Co., which had two bulk and 42 service stations in Columbus and nearby territory. The Accurate Measure company was developed by F. M. Morrison and associates. Mr. Morrison has been a director of the Ohio Petroleum Marketers Association for years.

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**Lone Star Gas Co.**—Stockholders of July 13 record are to be given right to subscribe for one additional share at $12.50 for each three shares held that date. Stockholders have approved changing the capital structure from 2,000,000 $25 shares to 7,000,000 no par shares and exchanging 2½ shares of new stock for one share of old stock. The split will be effective July 15. Subscription rights expire Aug. 5.

**Sinclair Consolidated Oil Corp.**—Report is that company netted approximately $13,000,000 in the first five months of 1929.


STANDARD
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ISSUES

CARL H. PFORZHEIMER & CO.

Specialists in Standard Oil and Miscellaneous Oil Securities

25 Broad Street New York

The famous Goodrich Gasoline Test. See details below.

Gasoline filling stations prefer Goodrich Gasoline Hose because of Celinol—the Goodrich developed sealing layer.

# Celinol makes this hose leak-proof

GOODRICH has developed a sealing layer for gasoline hose that gasoline cannot rot—Celinol. Celinol represents one of the most important contributions of Goodrich's 58 years of hose manufacture.

Celinol is an exclusive rubber compound, developed in Goodrich laboratories. It resists the disintegrating action of gasoline that so quickly robs ordinary rubber of its long life and gasoline-tightness.

Celinol not only resists the solvent action of gasoline, but shows 50 percent less deterioration in tensile strength and only one-third the degree of swelling, as compared with other rubbers—including many so-called "gasoline-proof compounds."

It is easy for you to prove the superiority of Goodrich hose by making the "immersion test." Take a small section of Celinol sealing layer and put it in a bottle filled with gasoline. Take a similar small section of ordinary rubber and put it in another bottle. Leave both samples immersed for sixty days.

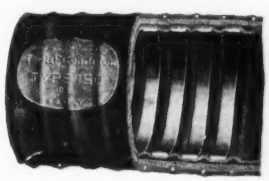
At the end of that time you will see that Celinol still retains its toughness and elasticity, whereas the other rubber has become gummy, has lost all resiliency and has discolored the gasoline.

We will gladly send a small sample of Goodrich Celinol so that you can make this test yourself. Write to The B. F. Goodrich Rubber Co., Est. 1870, Akron, O., (In the West, Pacific Goodrich Co., Los Angeles, Cal.) or send the coupon below.

**The Goodrich Guarantee**

*Guaranteed against defect for 24 months after hose is placed in service—a copy of the guarantee is attached to every length before it leaves the factory*

**Oil Suction and Discharge Hose**



Scientifically balanced combination of wire, fabric and oil-proof rubber. Also made with reinforced cover and ends for sea-loading service. Dock records of leading oil companies show this hose outlasts other makes 25% to 50%.

**Goodrich Distillate Hose**

For conducting fuel oil. The oil-proof tube and cover are the result of years of chemical research work. This hose contains no metal. Light and flexible. Furnished in long lengths. Sizes — 1", 1¼", 1½" and 2".

N.P.N.-6

THE B. F. GOODRICH RUBBER CO.,
Akron, Ohio.

Gentlemen: Please send me a small sample of Celinol sealing layer so that I may test its superiority myself.

Name .....

Firm .....

Address .....

# Goodrich

# Transactions in Oil Shares on New York Stock Exchange

| 1928 High | 1928 Low | 1929 High | 1929 Low | Listed Capital | Par Value | Stocks | Div. Rate | Last Paid | Transactions Week Ended June 29 Sales | First | High | Low | Last | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43⅞ | 27⅛ | 42⅝ | 22½ | (sh) 922,075 | N.P. | Amerada Corp | 50cQ | Apr. 30, 29 | 3,900 | 24¾ | 25¾ | 24½ | 24¾ | + ¼ |
| 85 | 51¼ | 64¾ | 43⅞ | (sh) 209,180 | N.P. | American Republics Corp | .... | ..... | 3,900 | 46⅝ | 47⅞ | 45 | 47⅞ | + 1⅞ |
| 5 ⅜ | 37½ | 47¼ | 40 | $56,000,000 | $25 | Associated Oil | 50cQ | June 30, 29 | 60 | 45 | 45 | 44¼ | 44¼ | + ¼ |
| 62½ | 50 | 73¼ | 53½ | 50,000,000 | 25 | Atlantic Refining | ‡25cQ | June 15, 29 | 194,000 | 70⅞ | *73¼ | 69¾ | 72⅜ | + 1¾ |
| 118¾ | 114½ | 117⅝ | 114 | 20,000,000 | 100 | do pfd | $1.75Q | May 1, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 53 | 20 | 49⅛ | 38⅛ | 47,261,125 | 25 | Barnsdall Corp. A | 50cQ | May 6, 29 | 80,000 | 40¾ | 42½ | 40⅛ | 41⅞ | + ⅞ |
| 51⅛ | 20 | 49 | 38⅛ | 300,525 | 25 | do B | 50cQ | May 6, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 24½ | 12¼ | 29½ | 20 | (sh) 956,075 | N.P. | Beacon Oil | .... | ..... | 16,600 | 28¼ | 28¾ | 27½ | 28½ | + ¼ |
| 36 | 25¼ | 30 | 25 | $51,524,150 | $25 | California Petroleum | .... | Jan. 1, 29 | 50 | 27½ | 27½ | 27½ | 27½ | + 2½ |
| 94⅞ | 68 | 87⅜ | 63 | 21,031,400 | 100 | General Asphalt | .... | ..... | 6,600 | 81½ | 83½ | 80½ | 82 | — ½ |
| 141 | 110⅛ | 131 | 104½ | 6,628,200 | 100 | do pfd | $1.25Q | June 1, 29 | 100 | 128½ | 128½ | 128½ | 128½ | + 1 |
| 167 | 79 | 107 | 70½ | 25,000,000 | 100 | Houston Oil | .... | ..... | 3,900 | 79 | 81 | 77 | 80 | + 1½ |
| 38⅜ | 21¾ | 39¼ | 30 | (sh) 1,333,157 | N.P. | Independent Oil & Gas | 50cQ | Apr. 30, 29 | 16,300 | 34¾ | 35⅛ | 34½ | 34⅞ | + ⅛ |
| 39⅝ | 9 | 52⅝ | 29 | $4,299,190 | $10 | Indian Refining | .... | Dec. 15, 20 | 51,200 | 45 | 45⅜ | 41⅞ | 44¾ | + ¾ |
| 37¼ | 8½ | 48¾ | 28 | 4,550,110 | 10 | do ctfs | ..... | ..... | 28,400 | 41¾ | 43⅜ | 40½ | 43 | + 1⅜ |
| 185 | 140 | 165 | 160 | 1,977,700 | 100 | do pfd. new | $1.75Q | Apr. 1, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 39⅛ | 27⅜ | 38⅜ | 26 | 3,992,387 | N.P. | Lago Oil & Transport | .... | May 2, 27 | 7,100 | 33⅞ | 36 | 34½ | 34½ | + 1 |
| 19¾ | 9⅜ | 18 | 12½ | (sh) 1,187,298 | N.P. | Louisiana Oil Refining | ..... | ..... | 8,400 | 12¾ | 12¾ | †12½ | 12½ | — ¼ |
| 96 | 78 | 100 | 89 | $4,000,000 | $100 | do pfd | $1.62½ | May 15, 29 | 170 | 92 | 92 | 90½ | 90½ | 0 |
| 25½ | 12½ | 18½ | 12 | (sh) 330,000 | N.P. | Maracaibo Oil | .... | ..... | 3,300 | 13½ | 14¾ | 13½ | 13¾ | — ¼ |
| 49¾ | 33 | 47⅛ | 33⅛ | (sh) 2,316,897 | N.P. | Marland Oil Co | .... | Mar. 31, 27 | 21,900 | 35⅝ | 36 | 34⅛ | 35 | — 1 |
| 360 | 250 | 295 | 205 | $45,942,800 | $100 | Mexican Petroleum | ‡$3Q | Apr. 20, 29 | 10 | 210 | 210 | 210 | 210 | + 3 |
| ... | ... | ... | ... | 12,000,000 | 100 | do pfd. new | $2Q | Apr 20, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 73 | 4⅝ | 69⅜ | 36¼ | (sh) 995,500 | N.P. | Mexican Seaboard | .... | Nov. 15. 24 | 97,900 | 47 | 53 | 44⅝ | 53 | + 8¾ |
| 44½ | 25⅛ | 39⅞ | 30½ | (sh) 1,857,461 | N.P. | Mid-Continent | 50cQ | May 15, 29 | 15,800 | 33⅞ | 34 | 33⅛ | 33½ | — ½ |
| 120½ | 103¼ | 121 | 120¼ | $6,718,000 | $100 | do pfd | $1.75Q | June 1, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 7⅜ | 2⅜ | 5⅛ | 3½ | 23,849,720 | 10 | Middle States | .... | July 1, 23 | 7,600 | 3⅝ | 3⅞ | 3½ | 3⅝ | 0 |
| 5⅞ | 1½ | 3½ | 2¼ | 5,950,500 | 10 | do ctfs | .... | ..... | 3,600 | 2½ | 3 | 2¼ | 2⅜ | — ⅛ |
| 2¼ | 1 | 1½ | 1 | (sh) 3,580,000 | N.P. | Pacific Oil | .... | ..... | 10,900 | 1⅛ | 1⅛ | 1 | 1 | 0 |
| 55½ | 38¼ | 63 | 41⅜ | $50,000,000 | $50 | Pan American P. & T | .... | Oct. 20, 27 | 1,300 | 57½ | 54½ | 53 | 53½ | — ½ |
| 58⅞ | 37¾ | 66¾ | 40⅛ | 121,101,400 | 50 | do B | .... | Oct. 20, 27 | 107,800 | 59 | 59⅜ | 55⅛ | 56⅝ | — 1⅞ |
| 28⅜ | 15½ | 17½ | 13¾ | (sh) 400,000 | N.P. | Pan American Western B | .... | Jan. 30, 27 | 1,100 | 14 | 14 | †13¾ | 13¾ | — ¾ |
| 21¾ | 11½ | 15¼ | 9½ | (sh) 199,370 | N.P. | Panhandle P. & R | .... | ..... | 500 | 10 | 10 | 9⅝ | 9⅝ | 0 |
| 106¼ | 70 | 76 | 47½ | $2,935,200 | $100 | do pfd | .... | July 2, 23 | 200 | 60 | 60 | 60 | 60 | — 2 |
| 53⅞ | 35¼ | 47 | 37¼ | (sh) 2,406,803 | N.P. | Phillips Petroleum | 37½cQ | July 1, 29 | 12,300 | 37¾ | 37¾ | 36⅞ | 37¼ | — ⅝ |
| 5¼ | ½ | 3⅜ | 2 | $29,622,925 | $25 | Pierce Oil | .... | ..... | 6,600 | 2 | 2⅛ | 2 | 2 | — ⅛ |
| 50 | 16¼ | 51½ | 30 | 15,000,000 | 100 | do pfd | .... | Feb. 1, 22 | 500 | 40 | 40 | 39 | 39 | — 1 |
| 6⅝ | 3½ | 5⅞ | 4¼ | (sh) 2,500,000 | N.P. | Pierce Petroleum | .... | ..... | 3,200 | 4¼ | 4½ | 4¼ | 4⅜ | — ¼ |
| 64⅝ | 59½ | 65⅝ | 55 | $60,636,450 | $25 | Prairie Oil & Gas | ..... | Aug. 31, 27 | 9,400 | 56⅝ | 56⅝ | 55½ | 55½ | — 1⅛ |
| ... | ... | 61⅛ | 53⅝ | 101,250,000 | 25 | Prairie Pipe Line | ‡75cQ | June 30. 29 | 7,100 | 59½ | 60 | 59¼ | 59½ | — ⅜ |
| 29⅞ | 16 | 25⅞ | 18⅛ | 37,450,850 | 50 | Producers & Refiners | .... | Sept. 15, 23 | 1,400 | 18¼ | 19½ | †18⅛ | 18½ | + ¼ |
| 49⅝ | 41 | 45⅜ | 38⅛ | 2,845,350 | 50 | do pfd | ..... | May 1, 25 | 40 | 41½ | 43 | 41 | 43 | + 1¼ |
| 31¼ | 19 | 30¾ | 23½ | 75,959,250 | 25 | Pure Oil Co | 37½cQ | June 1, 29 | 29,100 | 27¼ | 27¼ | 26⅛ | 26⅝ | — ⅝ |
| 119 | 108 | 115½ | 111½ | 13,000,000 | 100 | do 8% pfd | $2Q | July 1, 29 | 100 | 112¾ | 113 | 111½ | 112 | 0 |
| 56 | 23½ | 49⅝ | 40 | 47,127,725 | 25 | Richfield Oil | 50cQ | May 15, 29 | 14,900 | 42 | 42⅞ | 41½ | 42 | + ¼ |
| ... | ... | 42½ | 28½ | (sh) 1,200,000 | N.P. | Rio Grande Oil Co | ‡$1S.A. | Jan. 25, 29 | 15,100 | 30 | 30 | 28¾ | 29½ | 0 |
| 64 | 44⅝ | 55⅜ | 31⅜ | (sh) 546,646 | $13.40 | Royal Dutch N. Y. shares | $1.336 | Feb. 8, 29 | 3,500 | 53⅜ | 53⅞ | 52⅛ | 53 | — ½ |
| 57½ | 39⅜ | 55¾ | 43 | (sh) 65,203,000 | £2 | Shell Transport & T | 96.4c | Feb. 8, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 39⅜ | 23¼ | 31¾ | 26 | 12,254,979 | N.P. | Shell Union Oil | 35cQ | July 1, 29 | 42,100 | 26¾ | 27 | 26¼ | 26⅝ | 0 |
| 27¼ | 18⅛ | 37¼ | 18¼ | $8,357,280 | $10 | Simms Petroleum | 40cQ | June 15, 29 | 21,100 | 30 | 31⅜ | 30 | 31 | 0 |
| 46¾ | 17⅜ | 45 | 36 | 5,494,095 | N.P. | Sinclair Consolidated | ‡50cQ | Apr. 15, 29 | 129,100 | 36⅝ | 37¼ | 35⅛ | 36¼ | — ¼ |
| 110 | 102½ | 111 | 107¾ | $16,025,200 | $100 | do pfd | $2Q | May 15, 29 | ..... | ..... | ..... | ..... | ..... | ..... |
| 42⅝ | 25 | 46⅛ | 32⅞ | 27,396,590 | 25 | Skelly Oil Co | 50cQ | June 15, 29 | 191,00 | 39¾ | 41 | 38⅛ | 41 | + ⅜ |
| 80 | 53 | 81⅞ | 64 | (sh) 13,016,435 | N.P. | S. O. California | 62½cQ | June 15, 29 | 39,200 | 73¾ | 75⅛ | 71⅜ | 72⅝ | — ½ |
| 59¾ | 37¾ | 62⅜ | 48 | $612,095,850 | $25 | S. O. New Jersey | ‡25cQ | June 15, 29 | 129,100 | 56¾ | 57⅜ | 56 | 57⅜ | + ⅝ |
| 45½ | 28¾ | 45¾ | 38⅝ | 434,094,575 | 25 | S. O. New York | 40cQ | June 15, 29 | 42,100 | 39⅞ | 39⅞ | 38⅞ | 39⅛ | — ½ |
| 77 | 31½ | 68½ | 57 | (sh) 1,297,847 | N.P. | Sun Oil | 25cQ | June 15, 29 | 3,500 | 64 | 65⅛ | 63⅛ | 65 | + 2 |
| 110 | 100 | 105½ | 100 | $5,000,000 | $100 | do pfd | $1.50Q | June 1, 29 | 160 | 102½ | 102½ | 100 | 100¼ | — 1¾ |
| 14¼ | 2½ | 12 | 7 | (sh) 1,304,698 | N.P. | Superior Oil Corp | .... | Dec. 20, 20 | 21,900 | 7⅝ | 7⅞ | 7⅜ | 7⅜ | — ⅜ |
| 74¾ | 50 | 68⅛ | 57¼ | $211,082,925 | $25 | The Texas Corp | 75cQ | July 1, 29 | 34,100 | 61 | 63 | 60½ | 62⅜ | + 1⅛ |
| 26⅝ | 12⅛ | 23⅞ | 16¼ | 8,380,340 | 10 | Texas Pacific Coal & Oil | 2½%e | June 30, 29 | 12,500 | 17⅞ | 18⅛ | 17⅛ | 17¼ | — ⅜ |
| 41½ | 19⅜ | 38½ | 27⅛ | (sh) 2,179,275 | N.P. | Tide Water Oil Co | 20cQ | June 30, 29 | 900 | 34¾ | 35 | 34⅛ | 35 | 0 |
| 100⅛ | 86¾ | 97½ | 89¾ | $20,321,000 | $100 | do 5½% pfd | $1.25Q | May 15, 29 | 1,000 | 94⅛ | 94¾ | 92⅜ | 92⅝ | — 2½ |
| 25 | 14¾ | 23½ | 17½ | (sh) 4,877,976 | N.P. | Tide Water Associated | .... | Aug. 1, 27 | 20,600 | 20 | 20⅛ | 19½ | 19⅝ | — ¼ |
| 91¾ | 81⅞ | 90 | 84 | $72,989,200 | $100 | do pfd | $1.50Q | July 1, 29 | 3,000 | 86 | 86 | 85 | 86 | + ⅛ |
| 14½ | 6¾ | 13 | 9 | (sh) 3,842,029 | N.P. | Transcontinental Oil | .... | ..... | 29,400 | 10⅜ | 10⅞ | 10½ | 10½ | — ⅜ |
| 58 | 42¾ | 54½ | 46 | $40,858,375 | $25 | Union Oil of California | 50cQ | May 10, 29 | 9,600 | 49¾ | 49¾ | 47⅝ | 47⅝ | — 1⅞ |
| 128⅛ | 110 | 150¼ | 121¼ | 31,101,200 | 100 | Union Tank Car Co | $1.25Q | June 1, 29 | 400 | 140 | 148 | 140 | 147 | + 5 |
| 44⅞ | 26 | 42⅞ | 28½ | (sh) 488,359 | N.P. | Warner Quinlan | 50cQ | July 2, 29 | 10,000 | 31½ | 33⅜ | 31 | 32⅞ | + 1⅜ |
| 38 | 20⅛ | 37⅛ | 30¼ | (sh) 490,000 | N.P. | White Eagle Oil & Refining | 50cQ | Apr. 20, 29 | 4,000 | 33⅞ | 34 | 33 | 34 | + ⅜ |
| 22⅛ | 17¼ | 29¾ | 19½ | (sh) 428,967 | N.P. | Wilcox Oil & Gas | .... | May 10, 28 | 1,000 | 20½ | 20½ | 20 | 20 | — 1¼ |

*New High †New Low XEx-dividends ‡Also extras s-Stock Total Sales 1,369,690

## Pittsburgh Stock Exchange

**Transactions Week Ended June 28, 1929**

| | Sales | High | Low | Last | Change |
|---|---|---|---|---|---|
| Ark. Nat. Gas | 2,980 | 9⅜ | 9 | 9⅛ | — ¼ |
| do pfd | 3,503 | 8¼ | 8⅛ | 8¼ | + ⅛ |
| Devonian Oil | 1,885 | 10 | 8½ | 8½ | —1½ |
| Dixie Gas & Util. | 100 | 15 | 14½ | 15 | —2 |
| do pfd | 45 | 69¾ | 69¾ | 69¾ | — ¼ |
| Lone Star Gas | 5,372 | *86 | 83 | 84¾ | +1½ |
| Plymouth | 1,355 | 25 | 23 | 24 | 0 |
| Pgh. Oil & Gas | 594 | 3½ | 3½ | 3½ | 0 |
| Salt Creek Cons. | 50 | 3 | 3 | 3 | 0 |
| Wav. Oil Wks. A | 225 | 29 | 28 | 28 | 0 |

## Pittsburgh Curb Market

**Transactions Week Ended June 28, 1929**

| | Sales | High | Low | Last | Change |
|---|---|---|---|---|---|
| Ark. Gas "A" | 563 | 9⅜ | 9½ | 9⅜ | — ⅛ |
| Penn-Mex. Fuel | 400 | 27½ | 27½ | 27½ | ... |
| **Unlisted** | | | | | |
| Lone Star Gas W.I. | 12,579 | *35 | 32½ | 32⅞ | —1⅛ |
| **Rights** | | | | | |
| Col. Gas & Elec | 450 | 5¼ | 5 | 5⅛ | + ¾ |
| Lone Star Gas | 5,565 | 6½ | 5½ | 5¾ | 0 |

*New High

## Paragon Buys Cleveland And Detroit Chain

CLEVELAND, June 29.—Paragon Refining Co. June 26 concluded the purchase of the bulk and 54 service stations of the Indian Oil Products Co. in Cleveland. This purchase gives Paragon 122 stations in Cleveland and suburbs, the second largest chain in this vicinity.

Paragon a few days previously bought the 18 service stations of the Cadillac Petroleum Co. in Detroit, in which city it had a chain of about 100 stations.

The Indian Oil Products Co. was organized in Cleveland in 1925 by John Roski, who was president and treasurer at the time of the sale. J. G. Malone was general manager, and W. P. Snyder was secretary.

Mr. Malone formerly was with the Sun Oil Co. He has been secretary of the Western Reserve Petroleum Club since its organization several years ago.

## Cleveland Stock Market

| June 28 | Par Value | Bid | Asked |
|---|---|---|---|
| Canfield Oil Co | $100 | ... | 143 |
| do pfd | 100 | 103 | ... |
| Fred G. Clark | 10 | 12½ | 14¼ |
| National Refining | 25 | ... | 36 |
| do pfd | 100 | ... | 135 |
| Paragon Refining | 25 | 24 | 24½ |
| do pfd | N.P. | 41½ | 44 |
| do ctfs. of deposit | ... | 24 | 25 |

xEx dividend.

---

NEW YORK, July 1.—The Continental Can Co., Inc., has acquired the Federal Can Co., Nashville, Tenn., reputed to be the largest manufacturer of coffee cans in the south. That company also makes general line cans for packing oils, chemicals, paints and other products.

# *Its* STRATEGY *that wins battles . . .*

# Imperial

QUALITY PRODUCTS

GASOLINES
*U. S. Motor*
*High Test*
*High Compression*
*Aviation*
KEROSENES
TRACTOR FUELS
FURNACE OILS
GAS OILS
FUEL OILS
ROAD OILS
LUBRICATING OILS

*And it's strategy that builds business.* The Jobber interested in building his business on a solid foundation of giving the motorist what he demands — *quality*, cannot overlook the Imperial franchise.

As strategy in battle demands superior armament, strategy with the jobber demands high quality petroleum products — *Imperial Quality Products.*

## Imperial Refineries

**Imperial Refining Co.** **San Angelo Refining Co.**
**Kettle Creek Refining Co.** **Wickett Refining Co.**

*General Offices*
TULSA, OKLAHOMA

# Standard Oil Stocks on New York Curb

| 1928 High | 1928 Low | 1929 High | 1929 Low | Outstanding Capital | Par Value | Stocks | Div. Rate | Last Paid | Transactions Week Ended June 29 Sales | First | High | Low | Last | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22⅜ | 14⅞ | 18¾ | 14¼ | £4,126,460 | £ 1 | Anglo-American Oil | 36c | June 5, 29 | 7,600 | 14⅞ | 15 | 14⅞ | 15 | + ⅜ |
| 21¼ | 15 | 18 | 14¼ | ..... | ... | do certificates | 36c | June 5, 29 | 4,500 | 14½ | 14½ | †14¼ | 14¼ | 0 |
| 20½ | 14⅜ | 17 | 13 | ..... | £ 1 | do cts. non-voting | 36c | June 5, 29 | 500 | 14⅜ | 14⅜ | 13⅜ | 13⅜ | + ⅛ |
| 5 | 1¼ | 2⅛ | 1⅛ | (sh) 500,000 | N.P. | Atlantic Lobos | ..... | ..... | ..... | ... | ... | ... | ... | ... |
| 9¾ | 3¼ | 4⅛ | 1½ | $10,000,000 | $50 | do pfd | ..... | ..... | 300 | 2 | 2 | 1⅝ | 1⅝ | — ⅛ |
| 56 | 44½ | 46½ | 38 | $1,000,000 | 25 | Borne-Scrymser | ‡$1S.A. | Apr. 15, 29 | ..... | ... | ... | ... | ... | ... |
| 76 | 58 | 74¼ | 58⅜ | 10,000,000 | 50 | Buckeye Pipe Line | ‡$1Q | June 15, 29 | 600 | 68 | 69⅜ | 68 | 69 | 0 |
| 161 | 117¼ | 170¼ | 140⅛ | 3,000,000 | 25 | Chesebrough Mfg | ‡$1Q | June 30, 29 | 100 | 168 | 168 | 168 | 168 | + ¼ |
| 23 | 16 | 29 | 17⅛ | 36,123,350 | 10 | Continental Oil | ..... | Dec. 15, 27 | 38,100 | 21 | 21⅛ | 20 | 20⅝ | — ½ |
| 17½ | 9½ | 11⅜ | 8 | ..... | N.P. | Creole Petroleum | ..... | ..... | 9,100 | 8¼ | 8⅜ | 8 | 8⅛ | — ⅜ |
| 82 | 67 | 75¼ | 62 | 1,500,000 | 50 | Cumberland Pipe Line | $1Q | June 15, 29 | 50 | 70 | 70 | 69 | 69 | + ¾ |
| 88 | 64⅛ | 70½ | 59¼ | 5,000,000 | 100 | Eureka Pipe Line | $1Q | June 1, 29 | ..... | ... | ... | ... | ... | ... |
| 13 | 4¼ | 6⅝ | 5 | 16,000,000 | 100 | Galena Signal Oil | ..... | June 30, 25 | 100 | 5 | 5 | 5 | 5 | 0 |
| 86 | 26 | 90 | 73½ | 4,000,000 | 100 | do new pfd | ..... | June 30, 26 | ..... | ... | ... | ... | ... | ... |
| 89¾ | 35 | 88 | 73½ | 2,000,000 | 100 | do old pfd | ..... | June 30, 26 | ..... | ... | ... | ... | ... | ... |
| 114⅜ | 59¼ | 124⅛ | 89⅜ | 73,685,700 | 25 | Humble Oil & Refining | ‡30cQ | July 1, 29 | 8,500 | 114⅜ | 117¼ | 113⅝ | 117 | + 2 |
| 290½ | 176½ | 340½ | 285 | 20,000,000 | 100 | Illinois Pipe Line | $10S.A. | June 15, 29 | 150 | 308¾ | 308¾ | 306 | 306 | — 2 |
| 104 | 56¾ | 119⅝ | 88 | (sh) 6,605,442 | N.P. | Imperial of Canada | 12½cQ | June 1, 29 | 3,300 | 27⅜ | 27⅝ | 26⅞ | 27¼ | 0 |
| ... | ... | ... | ... | ..... | ... | do new | ..... | ..... | ..... | ... | ... | ... | ... | ... |
| 91⅞ | 74⅜ | 99⅞ | 81¼ | $5,000,000 | $50 | Indiana Pipe Line | ‡$1Q | May 15, 29 | 800 | 95¾ | *99⅞ | 95½ | 99⅞ | + 4⅞ |
| 55 | 35 | 65½ | 46⅛ | (sh) 7,123,544 | N.P. | International Petroleum | 12½c | June 25, 29 | ..... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ..... | ... | do new | ..... | ..... | 6,800 | 22⅞ | 23⅜ | 22½ | 23⅜ | + ⅝ |
| 32⅜ | 19¾ | 25⅞ | 21⅜ | $6.363,350 | 12.50 | National Transit Co | 25cQ | June 15, 29 | 600 | 22⅞ | 23½ | 22⅝ | 23 | — 1 |
| ... | ... | ... | ... | ..... | ... | do new | ..... | ..... | ..... | ... | ... | ... | ... | ... |
| 75 | 38½ | 85 | 72 | 5,000,000 | 100 | New York Transit | ..... | July 15, 26 | ..... | ... | ... | ... | ... | ... |
| 69 | 56½ | 63 | 52 | 2,000,000 | 50 | Northern Pipe Line | $2S.A. | July 1, 29 | 100 | 54 | 54¾ | 54 | 54¾ | + 2¾ |
| 83½ | 58½ | 75⅜ | 64⅛ | 60,000,000 | 25 | Ohio Oil Co | 50cQ | June 15, 29 | 300 | 72⅛ | 72⅛ | 71 | 72 | + ¼ |
| 84 | 28 | 44½ | 23⅜ | 10,000,000 | 25 | Penn Mex. Fuel | 75c | Dec. 16, 28 | 600 | 27½ | 27½ | 26 | 26 | + ⅛ |
| 220 | 167 | 50 | 39 | 4,000,000 | 25 | Solar Refining | $1.25S.A. | June 20, 29 | 200 | 39 | 40 | †39 | 39⅞ | + ⅝ |
| 19 | 12 | 22½ | 13 | 1,000,000 | 10 | Southern Pipe Line | $1 | Mar. 1, 29 | 500 | 20¼ | 20⅞ | 20¼ | 20⅞ | + ⅞ |
| 71⅞ | 36¾ | 60¾ | 40⅛ | 30,000,000 | 25 | South Penn Oil | 50cQ | June 30, 29 | 1,300 | 53½ | 53⅞ | 52⅛ | 53 | — ¼ |
| 102 | 70 | 70 | 62¾ | 1,750,000 | 50 | South West Pa. Pipe Lines | $1 | July 1, 29 | ..... | ... | ... | ... | ... | ... |
| 95⅞ | 70⅞ | 103¼ | 54 | 348,175,069 | 25 | S. O. Indiana | 62½cQ | June 15, 29 | 41,600 | 55¾ | 56½ | 55¼ | 55¾ | 0 |
| 27¼ | 15 | 21⅞ | 18 | 8,000,000 | 25 | S. O. Kansas | ..... | June 16, 24 | 1,400 | 21¾ | 21⅞ | 21½ | 21⅞ | + ¼ |
| 49 | 44 | 45¼ | 35⅜ | 25,654,516 | 10 | S. O. Kentucky new | 40cQ | June 30, 29 | 3,430 | 36⅞ | 37⅞ | 36⅝ | 37¾ | + ⅝ |
| 54⅝ | 39⅞ | 50¾ | 45½ | 4,649,225 | 25 | S. O. Nebraska | ‡62½cQ | June 20, 29 | 200 | 47 | 47 | 46¼ | 46¼ | — ¾ |
| 134 | 71 | 129 | 110¼ | 14,000,000 | 25 | S. O. Ohio | 62½cQ | July 1, 29 | 500 | 120¼ | 121¾ | 119 | 121¾ | + ¾ |
| 125 | 116 | 124½ | 115 | 7,000,000 | 100 | do pfd | $1.75Q | June 1, 29 | ..... | ... | ... | ... | ... | ... |
| 23½ | 16 | 18 | 14 | 861,466 | 25 | Swan Finch Co | 30c | Jan. 15, 29 | ..... | ... | ... | ... | ... | ... |
| 111 | 72 | 133¾ | 105½ | 126,154,000 | 25 | Vacuum Oil | $1Q | June 20, 29 | 1,900 | 115 | 117⅜ | 114½ | 117⅜ | + 1⅜ |

*New High †New Low ‡Also Extras

# Independent Oils on New York Curb

| 1928 High | 1928 Low | 1929 High | 1929 Low | Par Value | Stocks | Transactions Week Ended June 29 Sales | First | High | Low | Last | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1½ | .53 | .72 | .375 | $ 5 | Amer. Cons. Oilfields | 6,800 | ½ | 9/16 | 7/16 | ½ | 0 |
| 9½ | 3⅛ | 8⅝ | 3½ | N.P. | Amer. Maracaibo | 7,800 | 4 | 4 | 3¾ | 3⅞ | 0 |
| 4½ | 2¼ | 5 | 1⅞ | $10 | Argo Oil | 100 | 2¼ | 2¼ | 2¼ | 2¼ | + ⅛ |
| 3¾ | 3⅜ | 9½ | 3¾ | N.P. | Arkansas Nat. Gas | 13,400 | 9⅛ | 9¼ | 9⅛ | 9¼ | — ⅛ |
| .... | .... | 9⅜ | 6¾ | N.P. | do A | 8,800 | 9½ | 9½ | 9⅜ | 9½ | 0 |
| .... | .... | 9 | 7⅞ | 10 | do pfd | 900 | 8¼ | 8¼ | 8⅛ | 8⅛ | — ⅛ |
| 55 | 32¾ | 62 | 50 | N.P. | British American Oil | ..... | ... | ... | ... | ... | ... |
| 23⅞ | 3¾ | 4⅞ | 2⅝ | 25c | Carib Syndicate | 2,800 | 3⅛ | 3¼ | 3 | 3⅛ | — ⅛ |
| .... | .... | 35 | 27¾ | N.P. | Cities Service new | 124,500 | 31⅜ | *35 | 31¼ | 35 | + 3½ |
| 103½ | 94½ | 98½ | 88⅜ | 100 | do pfd | 1,800 | 96½ | 96½ | 95¾ | 95¾ | — ¾ |
| 9⅝ | 8⅞ | 9¼ | 8⅞ | 10 | do pref. B | 1,100 | 9 | 9 | 9 | 9 | — ⅛ |
| 97 | 88½ | 96 | 92 | 100 | do pref. BB | 100 | 92 | 92 | 92 | 92 | — ½ |
| 2¼ | 1 | 1½ | 5/8 | 1 | Colombia Syndicate | 3,100 | 1 | 1 | ¾ | 7/8 | 0 |
| 17¾ | 9¾ | 15 | 6 | N.P. | Colon Oil | 3,400 | 7⅝ | 7¾ | 7 | 7⅛ | + ¾ |
| 8⅞ | 6¼ | 11⅛ | 6¾ | 10 | Consolidated Royal | 400 | 6⅞ | 7 | 6¾ | 6¾ | — ¼ |
| .... | .... | 75½ | 45 | N.P. | Cosden Oil Co | 13,400 | 65 | *75½ | 64 | 70 | + 7 |
| 3¼ | .76 | 2½ | 1⅜ | N.P. | Crown Central | 100 | 1½ | 1½ | 1½ | 1½ | — ¼ |
| 15 | 6¾ | 11¾ | 8 | N.P. | Crystal Oil | ..... | ... | ... | ... | ... | ... |
| 50 | 48 | 51⅛ | 51⅛ | $100 | do pfd | ..... | ... | ... | ... | ... | ... |
| 33½ | 8⅛ | 26 | 14 | N.P. | Darby Petroleum | 1,400 | 14 | 16⅜ | 14 | 16⅜ | + 2¼ |
| 13½ | 7⅛ | .... | .... | .... | do trust ctfs | ..... | ... | ... | ... | ... | ... |
| 2⅞ | 1 | 10⅞ | 2 | N.P. | Derby Oil & Refining | 9,100 | 10⅞ | *10⅞ | 9½ | 9½ | — 1¼ |
| 21⅜ | 7½ | 39⅛ | 20⅞ | N.P. | do pfd | ..... | ... | ... | ... | ... | ... |
| 165 | 101⅛ | 189 | 142⅝ | $25 | Gulf Oil Corp | 4,600 | 174⅞ | 174⅞ | 170⅝ | 174⅞ | + 2⅞ |
| 7½ | 5⅜ | 7½ | 3⅜ | 5 | Homaokla Oil | 1,700 | 3⅞ | 4⅝ | †3⅝ | 4⅝ | + ⅝ |
| 3⅜ | 1 | 2⅞ | 1¼ | 10 | Intercontinental Pet. | 9,500 | 1⅝ | 1⅝ | 1⅜ | 1½ | — ¼ |
| 3 | ¼ | 3⅝ | 1½ | N.P. | Kirby Petroleum | 200 | 1¾ | 1¾ | 1½ | 1½ | — ⅛ |
| 9¾ | 5⅛ | 6⅛ | 2⅞ | N.P. | Leonard Oil & Dev | 3,400 | 4⅜ | 4½ | 3⅜ | 4 | — ⅜ |
| 43⅜ | 20 | 38⅞ | 24¾ | N.P. | Lion Oil & Refg | 800 | 34 | 35½ | 33½ | 35½ | + 2 |
| 69⅛ | 48⅛ | 87 | 67 | $25 | Lone Star Gas | 2,000 | 85¼ | *87 | 84 | 84¼ | + ¼ |
| .... | .... | .... | .... | .... | do new | 1,000 | 35⅞ | 35⅞ | 32¼ | 34½ | + 2 |
| 1⅞ | .50 | 1⅛ | 3/8 | 1 | Magdalena Syndicate | 500 | 7/16 | 7/16 | 7/16 | 7/16 | 0 |
| 48½ | 32 | 38½ | 21¾ | N.P. | Margay Oil | 200 | 20½ | 20½ | 20 | 20 | — ¾ |
| 40½ | 40½ | .... | .... | $10 | Mexican-Panuco | ..... | ... | ... | ... | ... | ... |
| 8 | 2⅜ | 6⅜ | 3⅜ | N.P. | Mexico-Ohio Oil | ..... | ... | ... | ... | ... | ... |
| .74 | .20 | .... | .... | $10 | Mexico Oil | ..... | ... | ... | ... | ... | ... |
| .... | .... | 42 | 15⅞ | N.P. | Missouri-Kan. P. L. | 2,800 | 33 | 33 | 28¾ | 29⅝ | — 3⅝ |
| 1¾ | .76 | 1½ | 7/8 | 1 | Mountain & Gulf | 1,200 | 1 | 1 | 7/8 | 7/8 | — ⅛ |
| 28⅞ | 19½ | 22⅞ | 14⅞ | 10 | Mountain Producers | 10 | 15 | 17⅜ | *14⅞ | 16 | + ⅞ |
| .... | .... | 35 | 24¾ | N.P. | Nat. Fuel Gas (new) | 8,800 | 33½ | *35 | 31 | 31⅞ | — 3 |
| 5⅜ | 4¼ | 5 | 3½ | 5 | New Bradford | 1,500 | 3½ | 3⅞ | 3½ | 3¾ | + ¼ |
| 5½ | 3 | 3½ | 3 | 10 | New England Fuel | ..... | ... | ... | ... | ... | ... |
| 11⅞ | 7⅛ | 9¾ | 5⅛ | 1 | New Mex. & Ariz | 100 | 5⅜ | 5⅜ | 5⅜ | 5⅜ | 0 |
| 15⅛ | 11⅛ | 24½ | 16 | 25 | New York Petrol | 200 | 17⅝ | 17⅝ | 16½ | 16½ | — ⅝ |
| 40 | 39⅛ | .... | .... | .... | North Amer. Oil Cons. | ..... | ... | ... | ... | ... | ... |
| 13¼ | 8⅜ | 11⅜ | 8¾ | N.P. | North Cent. Texas | 400 | 10⅝ | 11⅛ | 10⅝ | 11⅛ | + ½ |
| .... | .... | 19¼ | 13 | N.P. | Oil Stock, Ltd. A | 200 | 14¼ | 14¼ | †13 | 13⅞ | — ½ |
| .... | .... | 18¼ | 15 | N.P. | do B | ..... | ... | ... | ... | ... | ... |
| 26¼ | 20 | 23¼ | 16 | N.P. | Pacific Western Oil | 200 | 16½ | 16⅝ | 16 | 16 | — ⅝ |
| 6 | 2¼ | 3½ | 1⅝ | N.P. | Pandem | 300 | 1¾ | 1¾ | 1⅝ | 1⅝ | — ⅛ |
| 15⅝ | 8½ | 10¼ | 6 | N.P. | Pantapec | 200 | 6¼ | 6¼ | 6⅛ | 6¼ | — ½ |
| 20 | 10⅝ | 25½ | 22½ | $25 | Paragon Refg. B. ctfs. | ..... | ... | ... | ... | ... | ... |
| .09 | .04 | .... | .... | N.P. | Peer Oil Corp | ..... | ... | ... | ... | ... | ... |
| 7¾ | 4⅞ | 7⅜ | 4⅜ | $10 | Pennok Oil | ..... | ... | ... | ... | ... | ... |
| .... | .... | 34½ | 26½ | N.P. | Petroleum Corp | 4,400 | 26¾ | 27¼ | †26½ | 27⅛ | + ⅜ |
| 5⅜ | 3⅛ | .... | .... | $5 | Pittsburgh Oil & Gas | ..... | ... | ... | ... | ... | ... |
| 31⅜ | 26½ | 30 | 22½ | N.P. | Plymouth Oil | 300 | 23⅞ | 24½ | 22½ | 24⅛ | + 1⅜ |
| 18 | 8 | 16 | 11½ | 25 | Red Bank Oil | ..... | ... | ... | ... | ... | ... |
| 13 | 4⅛ | 8½ | 4½ | N.P. | Reiter-Foster | 800 | 5⅛ | 5⅜ | †4½ | 4½ | 0 |
| 31½ | 23¼ | 25½ | 23⅜ | $25 | Richfield pfd | 100 | 24⅛ | 24⅛ | 24⅛ | 24⅛ | 0 |
| .... | .... | 29 | 23 | .... | Root Refining pfd | 600 | 24¼ | 24¾ | 24¼ | 24½ | — ¼ |
| 12 | 4⅝ | 11 | 6½ | N.P. | Ryan Consolidated | 300 | 6½ | 6⅞ | †6½ | 6⅝ | + ⅛ |
| 7¼ | 5½ | 5⅞ | 3⅜ | $10 | Salt Creek Cons | 400 | 3⅛ | 3⅛ | 3⅛ | 3⅛ | 0 |
| 35 | 23¼ | 25⅛ | 17¾ | 10 | Salt Creek Prod | 700 | 18⅛ | 20⅞ | 18 | 18⅜ | + ⅜ |
| 3½ | 1 | 2½ | 1⅜ | 5 | Savoy Oil | ..... | ... | ... | ... | ... | ... |
| 40 | 27 | 33⅛ | 32 | 25 | Shreveport El Dorado | ..... | ... | ... | ... | ... | ... |
| .... | .... | 24 | 17½ | N.P. | Southland Royalty | 2,100 | 18 | 18⅛ | †17½ | 17⅞ | — ⅝ |
| .... | .... | 23 | 15½ | N.P. | Texon Oil & Land new | 300 | 16 | 16 | 15½ | 15½ | — 1¾ |
| 22⅞ | 13 | 16⅞ | 11⅝ | $10 | Tidal Osage | ..... | ... | ... | ... | ... | ... |
| 21¼ | 13⅛ | 16½ | 10⅛ | 10 | do not-voting | ..... | ... | ... | ... | ... | ... |
| 93¾ | 75 | 136 | 80 | 100 | Transcontinental pfd. | 100 | 134½ | 134½ | 134½ | 134½ | — 1½ |
| 74¼ | 18 | 70½ | 66 | 10 | Venezuela-Mexico | ..... | ... | ... | ... | ... | ... |
| 9⅛ | 4¾ | 6½ | 3⅛ | 5 | Venezuelan Petrol | 1,100 | 4 | 4 | 3⅞ | 3⅞ | — ⅛ |
| 8¼ | 4⅞ | 9¼ | 4⅛ | 1 | Woodley Petroleum | 1,800 | 4⅜ | 4¾ | †4⅛ | 4¾ | — ⅛ |
| ⅝ | ⅛ | 5⅜ | 1⅝ | 25 | Y Oil & Gas | ..... | ... | ... | ... | ... | ... |

*New High †New Low

# New York Curb Bonds

**Week Ending June 28, 1929**

| | High | Low | Last | Change |
|---|---|---|---|---|
| Beacon Oil 6s '36 | 117 | 115⅛ | 116 | — ¾ |
| Cities Serv. 5s '66 | 87¾ | 87 | 87¾ | + ¼ |
| Cities Serv. G 5½s '42 | 88 | 86¾ | 88 | +1½ |
| Cities Serv. G. P. 6s '43 | 95 | 94⅜ | 95 | + ¾ |
| Cont. Oil 5¼s '37 | 93½ | 93 | 93 | —1 |
| Empire O & R 5½s '42 | 86⅞ | 86¼ | 86⅝ | + ⅜ |
| Gulf Oil 5s '37 | 99¼ | 98⅞ | 99 | — ¼ |
| Gulf Oil 5s '47 | 100¼ | 99¾ | 99¾ | 0 |
| Indep. Oil 6s '39 | 112 | 109⅜ | 111 | — ⅜ |
| Richfield Oil 6s '44 | 99¾ | 99¼ | 99¼ | 0 |
| Richfield Oil 5½s '31 | 100½ | 100¼ | 100½ | + ½ |
| Sun Oil 5½s '39 | 99¾ | 99½ | 99½ | — ½ |
| Valvoline Oil 7s '37 | 104¾ | 104¼ | 104¼ | — ¼ |

# Oil Dividends

| | Amount | Payable | Stock of Record |
|---|---|---|---|
| Barnsdall A & B q | 50c | Aug. 6 | July 8 |
| do extra | 25c | Aug. 6 | July 8 |
| Eureka Pipe Line q | $1 | Aug. 1 | July 15 |
| Indiana Pipe Line q | $1 | Aug. 15 | July 26 |
| do extra | $3 | Aug. 15 | July 26 |
| do special | $20 | Aug. 15 | July 26 |
| West Coast Oil pfd. q | $1.50 | July 5 | June 29 |
| do extra | $3 | July 5 | June 29 |

# New York Bonds

**Week Ending June 28, 1929**

| | High | Low | Last | Change |
|---|---|---|---|---|
| Assoc. Oil gold 6s | 101½ | 101¼ | 101¼ | — ⅜ |
| Atlantic Refg. deb. 5s | 100⅝ | 100 | 100⅝ | — ¼ |
| Cal. Pet. 5s | 96 | 96 | 96 | 0 |
| Cal. Pet. 5½s | 99 | 98¾ | 99 | 0 |
| General Asphalt 6s | 105 | 105 | 105 | — ⅞ |
| General Pet. 5s | 101 | 100¼ | 100¼ | — ⅛ |
| Humble Oil & Refg. 5s | 100 | 99¾ | 100 | + ¼ |
| Humble Oil & Refg. 5½s | 101 | 100 | 100¾ | — ⅛ |
| Pan Amer. P & T 7s | 104½ | 104½ | 104½ | 0 |
| Pan Amer. P & T 6s | 108 | 107 | 107 | — ⅝ |
| Pan Amer. P & T 6s | 94 | 93¼ | 93¾ | — ¼ |
| Phillips Pet. 5½s | 89¼ | 88 | 88½ | — ½ |
| Pierce Oil deb. 8s | 106 | 105¾ | 105¾ | — ¼ |
| Pure Oil 5½s | 97¾ | 97⅛ | 97⅜ | — ½ |
| Shell Union Oil 5s | 96 | 94 | 94 | — 2⅛ |
| Simms Pet. 6s | 99½ | 99¼ | 99¼ | + ¼ |
| Sinclair Con. Oil 7s | 101⅞ | 101 | 101¼ | + ⅛ |
| Sinclair Con. Oil 6½s | 99⅝ | 99¼ | 99½ | 0 |
| Sinclair Con. Oil 6s D | 99⅛ | 99 | 99⅛ | 0 |
| Sinclair Con. Oil Crude 5½s | 94⅞ | 94⅛ | 94½ | — ⅜ |
| Sinclair Pipeline | 93¾ | 93 | 93½ | 0 |
| Skelly Oil 5½s | 93 | 92⅝ | 93 | 0 |
| S. O. N. Y. 4½s | 95⅝ | 94⅝ | 95 | 0 |
| S. O. N. J. 5½s | 101⅜ | 101½ | 101 | 0 |
| Union Oil of Calif. 6s A | 106⅞ | 106⅞ | 106⅞ | +1⅞ |
| Union Oil of Calif. 5s C | 96 | 95¾ | 96 | + ¾ |
| White Eagle Oil 5½s | 99⅛ | 99⅛ | 99⅛ | — ⅜ |